

DEPARTMENT OF ENERGY RESEARCH, DEVELOPMENT,  
AND DEMONSTRATION AUTHORIZATION ACT OF 1999

JULY 20, 1999.—Committed to the Committee of the Whole House on the State of  
the Union and ordered to be printed

Mr. SENSENBRENNER, from the Committee on Science,  
submitted the following

R E P O R T

together with

SUPPLEMENTAL VIEWS

[To accompany H.R. 1655]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science, to whom was referred the bill (H.R. 1655) to authorize appropriations for fiscal years 2000 and 2001 for the civilian energy and scientific research, development, and demonstration and related commercial application of energy technology programs, projects, and activities of the Department of Energy, and for other purposes, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

CONTENTS

	Page
I. Amendment .....	2
II. Purpose of the Bill .....	11
III. Background and Need for Legislation .....	11
IV. Summary of Hearings .....	13
V. Committee Actions .....	19
VI. Summary of Major Provisions of the Bill .....	21
VII. Section-By-Section Analysis and Committee Views .....	37
VIII. Cost Estimate .....	48
IX. Congressional Budget Office Cost Estimate .....	49
X. Compliance with Public Law 104-4 .....	51
XI. Committee Oversight Findings and Recommendations .....	51
XII. Oversight Findings and Recommendations by the Committee on Gov- ernment Reform .....	51
XIII. Constitutional Authority Statement .....	52

XIV. Federal Advisory Committee Statement .....	52
XV. Congressional Accountability Act .....	52
XVI. Changes in Existing Law Made by the Bill, as Reported .....	52
XVII. Committee Recommendations .....	52
XVIII. Committee Correspondence .....	52
XIX. Supplemental Views .....	54
XX. Proceedings of Committee on Science Markup .....	56

## I. AMENDMENT

The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

### SECTION 1. SHORT TITLE.

This Act may be cited as the “Department of Energy Research, Development, and Demonstration Authorization Act of 1999”.

### SEC. 2. DEFINITIONS.

For the purposes of this Act, the term—

- (1) “Department” means the Department of Energy; and
- (2) “Secretary” means the Secretary of Energy.

### SEC. 3. AUTHORIZATION OF APPROPRIATIONS.

(a) ENERGY SUPPLY.—There are authorized to be appropriated to the Secretary for Energy Supply civilian energy and scientific research, development, and demonstration and related commercial application of energy technology operation and maintenance and construction programs, projects, and activities for which specific sums are not authorized under other authority of law \$432,366,000 for fiscal year 2000 and \$452,577,000 for fiscal year 2001, to remain available through the end of fiscal year 2002, of which—

(1) \$316,624,000 for fiscal year 2000 and \$325,321,000 for fiscal year 2001 shall be for Solar and Renewable Resources Technologies, including—

(A) \$3,708,000 for fiscal year 2000 and \$3,819,000 for fiscal year 2001 for Solar Building Technology Research;

(B) \$83,345,000 for fiscal year 2000 and \$85,845,000 for fiscal year 2001 for Photovoltaic Energy Systems;

(C) \$17,510,000 for fiscal year 2000 and \$18,035,000 for fiscal year 2001 for Concentrating Solar Power, of which \$2,000,000 for fiscal year 2000 and \$3,000,000 for fiscal year 2001 shall be for experimental beamed power technology demonstrations;

(D) \$75,396,000 for fiscal year 2000 and \$77,658,000 for fiscal year 2001 for Biopower/Biofuels Energy Systems;

(E) \$35,814,000 for fiscal year 2000 and \$36,889,000 for fiscal year 2001 for Wind Energy Systems;

(F) \$1,500,000 for fiscal year 2000 and \$1,500,000 for fiscal year 2001 for the Renewable Energy Production Incentive Program;

(G) \$6,000,000 for fiscal year 2000 and \$6,000,000 for fiscal year 2001 for the International Solar Energy Program;

(H) \$1,100,000 for fiscal year 2000 and \$1,100,000 for fiscal year 2001 for the National Renewable Energy Laboratory;

(I) \$33,500,000 for fiscal year 2000 and \$35,000,000 for fiscal year 2001 for Geothermal, of which \$4,000,000 for fiscal year 2000 and \$4,615,000 for fiscal year 2001 shall be derived from amounts otherwise authorized under this subsection, from savings resulting from reductions in contractor travel pursuant to section 10(d);

(J) \$3,348,000 for fiscal year 2000 and \$3,448,000 for fiscal year 2001 for Hydropower;

(K) \$41,303,000 for fiscal year 2000 and \$42,542,000 for fiscal year 2001 for Electric Energy Systems and Storage; and

(L) \$18,100,000 for fiscal year 2000 and \$18,100,000 for fiscal year 2001 for Program Direction; and

(2) \$115,742,000 for fiscal year 2000 and \$127,256,000 for fiscal year 2001 shall be for Nuclear Energy, including—

(A) \$37,000,000 for fiscal year 2000 and \$37,000,000 for fiscal year 2001 for Advanced Radioisotope Power Systems;

(B) \$6,070,000 for fiscal year 2000 and \$6,070,000 for fiscal year 2001 for Test Reactor Area Landlord operation and maintenance;

(C) \$1,430,000 for fiscal year 2000 and \$1,944,000 for fiscal year 2001 for construction of Project 99-E-200, Test Reactor Area Electric Utility Upgrade, Idaho National Engineering and Environmental Laboratory;

(D) \$1,500,000 for fiscal year 2000 and \$2,500,000 for fiscal year 2001 for construction of Project 95-E-201, Test Reactor Area Fire and Life Safety Improvements, Idaho National Engineering and Environmental Laboratory;

(E) \$13,500,000 for fiscal year 2000 and \$16,000,000 for fiscal year 2001 for University Reactor Fuel Assistance and Support;

(F) \$5,000,000 for fiscal year 2000 and \$7,500,000 for fiscal year 2001 for Nuclear Energy Plant Optimization;

(G) \$30,000,000 for fiscal year 2000 and \$35,000,000 for fiscal year 2001 for the Nuclear Energy Research Initiative; and

(H) \$21,242,000 for fiscal year 2000 and \$21,242,000 for fiscal year 2001 for Program Direction.

(b) SCIENCE.—There are authorized to be appropriated to the Secretary for science scientific and civilian energy research, development, and demonstration operation and maintenance and construction programs, projects, and activities for which specific sums are not authorized under other authority of law \$2,657,761,000 for fiscal year 2000 and \$2,691,465,000 for fiscal year 2001, to remain available until expended, of which—

(1) \$715,090,000 for fiscal year 2000 and \$753,110,000 for fiscal year 2001 shall be for High Energy Physics, including—

(A) \$235,190,000 for fiscal year 2000 and \$246,950,000 for fiscal year 2001 for High Energy Physics Research and Technology;

(B) \$451,200,000 for fiscal year 2000 and \$473,760,000 for fiscal year 2001 for High Energy Physics Facility Operations;

(C) \$2,000,000 for fiscal year 2000 and \$5,200,000 for fiscal year 2001 for construction of Project 00-G-307, Research Office Building, Stanford Linear Accelerator Center;

(D) \$4,700,000 for fiscal year 2000 and \$4,200,000 for fiscal year 2001 for construction of Project 99-G-306, Wilson Hall Safety Improvements Project, Fermi National Accelerator Laboratory; and

(E) \$22,000,000 for fiscal year 2000 and \$23,000,000 for fiscal year 2001 for construction of Project 98-G-304, Neutrinos at the Main Injector, Fermi National Accelerator Laboratory;

(2) \$357,714,000 for fiscal year 2000 and \$375,600,000 for fiscal year 2001 shall be for Nuclear Physics;

(3) \$413,674,000 for fiscal year 2000 and \$434,357,000 for fiscal year 2001 shall be for Biological and Environmental Research;

(4) \$698,800,000 for fiscal year 2000 and \$733,740,000 for fiscal year 2001 shall be for Basic Energy Sciences, including—

(A) \$405,390,000 for fiscal year 2000 and \$425,660,000 for fiscal year 2001 for Materials Sciences Research and Facilities Operations;

(B) \$217,179,000 for fiscal year 2000 and \$228,038,000 for fiscal year 2001 for Chemical Sciences Research and Facilities Operations;

(C) \$18,820,000 for fiscal year 2000 and \$19,761,000 for fiscal year 2001 for Engineering Research;

(D) \$26,056,000 for fiscal year 2000 and \$27,359,000 for fiscal year 2001 for Geosciences Research; and

(E) \$31,355,000 for fiscal year 2000 and \$32,923,000 for fiscal year 2001 for Energy Biosciences;

(5) \$31,474,000 for fiscal year 2000 and \$32,333,000 for fiscal year 2001 shall be for Computational and Technology Research, including—

(A) \$17,174,000 for fiscal year 2000 and \$18,033,000 for fiscal year 2001 for Mathematical, Information, and Computational Sciences; and

(B) \$14,300,000 for fiscal year 2000 and \$14,300,000 for fiscal year 2001 for Laboratory Technology Research;

(6) \$1,000,000 for fiscal year 2000 and \$1,000,000 for fiscal year 2001 shall be for Energy Research Analysis;

(7) \$22,309,000 for fiscal year 2000 and \$23,425,000 for fiscal year 2001 shall be for Multiprogram Energy Laboratories—Facility Support;

(8) \$250,000,000 for fiscal year 2000 and \$275,000,000 for fiscal year 2001 shall be for Fusion Energy Sciences, including \$13,600,000 for fiscal year 2000 and \$19,400,000 for fiscal year 2001 for Tokamak Fusion Test Reactor Decontamination and Decommissioning;

(9) \$49,800,000 for fiscal year 2000 and \$49,800,000 for fiscal year 2001 shall be for Science Program Direction;

(10) \$17,900,000 for fiscal year 2000 and \$13,100,000 for fiscal year 2001 shall be for Spallation Neutron Source research and development; and

(11) \$100,000,000 for fiscal year 2000 shall be for construction of Project 99-E-334, Spallation Neutron Source, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

(c) FOSSIL ENERGY RESEARCH AND DEVELOPMENT.—There are authorized to be appropriated to the Secretary for Fossil Energy Research and Development civilian energy and scientific research, development, and demonstration and related commercial application of energy technology operation and maintenance programs, projects, and activities for which specific sums are not authorized under other authority of law \$397,564,000 for fiscal year 2000 and \$427,102,000 for fiscal year 2001, to remain available through the end of fiscal year 2002, of which—

(1) \$126,609,000 for fiscal year 2000 and \$126,614,000 for fiscal year 2001 shall be for Coal, including—

(A) \$5,250,000 for fiscal year 2000 and \$5,407,000 for fiscal year 2001 for Coal Preparation;

(B) \$1,641,000 for fiscal year 2000 for Direct Liquefaction;

(C) \$6,659,000 for fiscal year 2000 and \$6,859,000 for fiscal year 2001 for Indirect Liquefaction;

(D) \$2,200,000 for fiscal year 2000 and \$2,310,000 for fiscal year 2001 for Advanced Clean Fuels Research Advanced Research and Environmental Technology;

(E) \$3,000,000 for fiscal year 2000 for Advanced Pulverized Coal-Fired Powerplant;

(F) \$7,010,000 for fiscal year 2000 and \$7,220,000 for fiscal year 2001 for Indirect Fired Cycle;

(G) \$38,661,000 for fiscal year 2000 and \$39,821,000 for fiscal year 2001 for High-Efficiency-Integrated Gasification Combined Cycle;

(H) \$15,077,000 for fiscal year 2000 and \$15,529,000 for fiscal year 2001 for High-Efficiency Pressurized Fluidized Bed;

(I) \$23,864,000 for fiscal year 2000 and \$25,057,000 for fiscal year 2001 for Advanced Clean/Efficient Power Systems Advanced Research and Environmental Technology; and

(J) \$23,247,000 for fiscal year 2000 and \$24,410,000 for fiscal year 2001 for Advanced Research and Technology Development;

(2) \$50,574,000 for fiscal year 2000 and \$52,091,000 for fiscal year 2001 shall be for Oil Technology, including—

(A) \$31,720,000 for fiscal year 2000 and \$32,671,000 for fiscal year 2001 for Exploration and Production Supporting Research;

(B) \$8,034,000 for fiscal year 2000 and \$8,275,000 for fiscal year 2001 for Recovery Field Demonstrations; and

(C) \$10,820,000 for fiscal year 2000 and \$11,145,000 for fiscal year 2001 for Oil Technology Effective Environmental Protection;

(3) \$107,916,000 for fiscal year 2000 and \$108,831,000 for fiscal year 2001 shall be for Gas, including—

(A) \$14,932,000 for fiscal year 2000 and \$15,380,000 for fiscal year 2001 for Natural Gas Research Exploration and Production;

(B) \$1,030,000 for fiscal year 2000 and \$1,061,000 for fiscal year 2001 for Natural Gas Research Delivery and Storage;

(C) \$41,808,000 for fiscal year 2000 and \$41,808,000 for fiscal year 2001 for Natural Gas Research Advanced Turbine Systems;

(D) \$9,330,000 for fiscal year 2000 and \$9,610,000 for fiscal year 2001 for Natural Gas Research Emerging Processing Technology Applications;

(E) \$3,108,000 for fiscal year 2000 and \$3,201,000 for fiscal year 2001 for Natural Gas Effective Environmental Protection;

(F) \$1,260,000 for fiscal year 2000 and \$1,323,000 for fiscal year 2001 for Fuel Cells Advanced Research; and

(G) \$36,449,000 for fiscal year 2000 and \$36,449,000 for fiscal year 2001 for Fuel Cells Systems;

(4) \$71,114,000 for fiscal year 2000 and \$72,796,000 for fiscal year 2001 shall be for Program Direction and Management Support, including—

(A) \$15,049,000 for fiscal year 2000 and \$15,049,000 for fiscal year 2001 for Headquarters Program Direction; and

(B) \$56,065,000 for fiscal year 2000 and \$57,747,000 for fiscal year 2001 for Energy Technology Center Program Direction;

(5) \$2,000,000 for fiscal year 2000 and \$2,060,000 for fiscal year 2001 shall be for GP-F-100, Plant and Capital Equipment, at Energy Technology Center sites;

(6) \$7,148,000 for fiscal year 2000 and \$7,537,000 for fiscal year 2001 shall be for Cooperative Research and Development;

(7) \$2,173,000 for fiscal year 2000 and \$2,173,000 for fiscal year 2001 shall be for Fuels Conversion, Natural Gas, and Electricity;

(8) \$5,000,000 for fiscal year 2000 and \$5,000,000 for fiscal year 2001 shall be for Advanced Metallurgical Processes; and

(9) \$25,000,000 for fiscal year 2000 and \$50,000,000 for fiscal year 2001 shall be for a Fossil Energy Science Initiative to be managed by the Assistant Secretary for Fossil Energy in consultation with the Director of the Office of Science, for grants to be competitively awarded and subject to peer review for research relating to fossil energy. The Secretary shall submit to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, an annual report on the activities of the Fossil Energy Science Initiative, including a description of the process used to award the funds and an explanation of how the research relates to fossil energy.

(d) ENERGY CONSERVATION RESEARCH AND DEVELOPMENT.—There are authorized to be appropriated to the Secretary for Energy Conservation Research and Development civilian energy and scientific research, development, and demonstration and related application of energy technology operation and maintenance programs, projects, and activities for which specific sums are not authorized under other authority of law \$490,212,000 for fiscal year 2000 and \$527,626,000 for fiscal year 2001, to remain available through the end of fiscal year 2002, of which—

(1) \$204,935,000 for fiscal year 2000 and \$210,845,000 for fiscal year 2001 shall be for the Transportation Sector, including—

(A) \$129,714,000 for fiscal year 2000 and \$133,606,000 for fiscal year 2001 for Vehicle Technology Research and Development;

(B) \$23,500,000 for fiscal year 2000 and \$24,205,000 for fiscal year 2001 for Fuels Utilization Research and Development, of which \$2,500,000 for fiscal year 2000 and \$2,750,000 for fiscal year 2001 shall be for biodiesel fuel research and development;

(C) \$5,196,000 for fiscal year 2000 and \$5,352,000 for fiscal year 2001 for Technology Deployment;

(D) \$38,599,000 for fiscal year 2000 and \$39,757,000 for fiscal year 2001 for Materials Technology; and

(E) \$7,925,000 for fiscal year 2000 and \$7,925,000 for fiscal year 2001 for Management and Planning;

(2) \$155,131,000 for fiscal year 2000 and \$159,534,000 for fiscal year 2001 shall be for the Industry Sector, including—

(A) \$59,180,000 for fiscal year 2000 and \$60,955,000 for fiscal year 2001 for Industries of the Future (Specific);

(B) \$87,600,000 for fiscal year 2000 and \$90,228,000 for fiscal year 2001 for Industries of the Future (Crosscutting); and

(C) \$8,351,000 for fiscal year 2000 and \$8,351,000 for fiscal year 2001 for Management and Planning;

(3) \$70,014,000 for fiscal year 2000 and \$72,115,000 for fiscal year 2001 shall be for the Building Technology, State and Community Sector (nongrants), including—

(A) \$55,870,000 for fiscal year 2000 and \$57,546,000 for fiscal year 2001 for Building Research; and

(B) \$14,144,000 for fiscal year 2000 and \$14,568,000 for fiscal year 2001 for Building Technology Assistance (nongrants);

(4) \$35,132,000 for fiscal year 2000 and \$35,132,000 for fiscal year 2001 shall be for Policy and Management; and

(5) \$25,000,000 for fiscal year 2000 and \$50,000,000 for fiscal year 2001 shall be for an Energy Efficiency Science Initiative to be managed by the Assistant Secretary for Energy Efficiency and Renewable Energy in consultation with the Director of the Office of Science, for grants to be competitively awarded and subject to peer review for research relating to energy efficiency. The Secretary shall submit to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, an annual report on the activities of the Energy Efficiency Science Initiative, including a description of the process used to award the funds and an explanation of how the research relates to energy efficiency.

**SEC. 4. GAS HYDRATE ENERGY AND SCIENTIFIC AND ENVIRONMENTAL RESEARCH AND DEVELOPMENT PROGRAM.**

(a) **IN GENERAL.**—Not later than 180 days after the date of enactment of this Act, the Secretary, acting through the Assistant Secretary for Fossil Energy, shall commence a program of gas hydrate energy and scientific and environmental research and development.

(b) **GRANTS, CONTRACTS, COOPERATIVE AGREEMENTS, INTERAGENCY FUNDS TRANSFER AGREEMENTS, AND FIELD WORK PROPOSALS.**—

(1) **ASSISTANCE.**—The Secretary, acting through the Assistant Secretary for Fossil Energy, may award grants or contracts to, or enter into cooperative agreements with, institutions of higher education and industrial enterprises to conduct energy and scientific and environmental research, development, and demonstration programs on gas hydrate.

(2) **PEER REVIEW.**—Funds made available under paragraph (1) for initiating contracts, grants, cooperative agreements, interagency funds transfer agreements, and field work proposals shall be made available based on a competitive selection process and a peer review of proposals. Exceptions shall be considered on a case-by-case basis, and reported by the Secretary, acting through the Assistant Secretary for Fossil Energy, to the Committee on Science of the House of Representatives and the Committee on Energy and Natural Resources of the Senate 30 days prior to any such award.

(c) **CONSULTATION.**—The Secretary, acting through the Assistant Secretary for Fossil Energy, may establish an advisory panel consisting of experts from industry, institutions of higher education, and other entities as the Secretary considers appropriate, to assist in developing recommendations and priorities for the gas hydrate research and development program carried out under subsection (a).

(d) **LIMITATIONS.**—

(1) **ADMINISTRATIVE EXPENSES.**—Not more than 5 percent of the amount made available to carry out this section for a fiscal year may be used by the Secretary, acting through the Assistant Secretary for Fossil Energy, for expenses associated with the administration of the program carried out under subsection (a).

(2) **CONSTRUCTION COSTS.**—None of the funds made available to carry out this section may be used for the construction of a new building or the acquisition, expansion, remodeling, or alteration of an existing building (including site grading and improvement and architect fees).

(e) **DEFINITIONS.**—For purposes of this section:

(1) **CONTRACT.**—The term “contract” means a procurement contract within the meaning of section 6303 of title 31, United States Code.

(2) **COOPERATIVE AGREEMENT.**—The term “cooperative agreement” means a cooperative agreement within the meaning of section 6305 of title 31, United States Code.

(3) **GRANT.**—The term “grant” means a grant awarded under a grant agreement, within the meaning of section 6304 of title 31, United States Code.

(4) **INSTITUTION OF HIGHER EDUCATION.**—The term “institution of higher education” means an institution of higher education, within the meaning of section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)).

(f) **AUTHORIZATION OF APPROPRIATIONS.**—Of the amounts authorized under section 3(c)(3), \$5,000,000 for fiscal year 2000 and \$7,500,000 for fiscal year 2001 shall be available for carrying out this section.

**SEC. 5. NOTICE.**

(a) **REPROGRAMMING.**—The Secretary may use for any authorized activities of the Department under this Act—

(1) up to the lesser of \$250,000 or 5 percent of the total funding for a fiscal year of a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology program, project, or activity of the Department; or

(2) after the expiration of 60 days after transmitting to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, a report described in subsection (b), up to 25 percent of the total funding for a fiscal year of a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology program, project, or activity of the Department.

(b) **REPORT.**—(1) The report referred to in subsection (a)(2) is a report containing a full and complete statement of the action proposed to be taken and the facts and circumstances relied upon in support of such proposed action.

(2) In the computation of the 60-day period under subsection (a)(2), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.

(c) LIMITATIONS.—In no event may funds be used pursuant to subsection (a) for a program, project, or activity for which funding has been requested to the Congress but which has not been funded by the Congress.

(d) NOTICE OF REORGANIZATION.—The Secretary shall provide notice to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, not later than 15 days before any major reorganization of any civilian energy or scientific research, development, or demonstration or related commercial application of energy technology program, project, or activity of the Department.

(e) COPY OF REPORTS.—The Secretary shall provide copies to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, of any report relating to the civilian energy or scientific research, development, or demonstration or related commercial application of energy technology programs, projects, and activities of the Department prepared at the direction of any committee of Congress.

#### SEC. 6. LIMITATION ON DEMONSTRATIONS.

The Department shall provide funding for civilian energy or scientific or related commercial application of energy technology demonstration programs, projects, and activities only for technologies or processes that can be reasonably expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

#### SEC. 7. LIMITS ON GENERAL PLANT PROJECTS.

If, at any time during the construction of a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology project of the Department for which no specific funding level is provided by law, the estimated cost (including any revision thereof) of the project exceeds \$2,000,000, the Secretary may not continue such construction unless the Secretary has furnished a complete report to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, explaining the project and the reasons for the estimate or revision.

#### SEC. 8. LIMITS ON CONSTRUCTION PROJECTS.

(a) LIMITATION.—Except as provided in subsection (b), construction on a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology project of the Department for which funding has been specifically provided by law may not be started, and additional obligations may not be incurred in connection with the project above the authorized funding amount, whenever the current estimated cost of the construction project exceeds by more than 10 percent the higher of—

- (1) the amount authorized for the project, if the entire project has been funded by the Congress; or
- (2) the amount of the total estimated cost for the project as shown in the most recent budget justification data submitted to Congress.

(b) NOTICE.—An action described in subsection (a) may be taken if—

- (1) the Secretary has submitted to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, a report on the proposed actions and the circumstances making such actions necessary; and
- (2) a period of 30 days has elapsed after the date on which the report is received by the committees.

(c) EXCLUSION.—In the computation of the 30-day period described in subsection (b)(2), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.

(d) EXCEPTION.—Subsections (a) and (b) shall not apply to any construction project which has a current estimated cost of less than \$2,000,000.

#### SEC. 9. AUTHORITY FOR CONCEPTUAL AND CONSTRUCTION DESIGN.

(a) REQUIREMENT FOR CONCEPTUAL DESIGN.—(1) Subject to paragraph (2) and except as provided in paragraph (3), before submitting to Congress a request for funds for a construction project that is in support of a civilian energy or scientific research,

development, or demonstration or related commercial application of energy technology program, project, or activity of the Department, the Secretary shall complete a conceptual design for that project.

(2) If the estimated cost of completing a conceptual design for a construction project exceeds \$750,000, the Secretary shall submit to Congress a request for funds for the conceptual design before submitting a request for funds for the construction project.

(3) The requirement in paragraph (1) does not apply to a request for funds for a construction project, the total estimated cost of which is less than \$2,000,000.

(b) **AUTHORITY FOR CONSTRUCTION DESIGN.**—(1) The Secretary may carry out construction design (including architectural and engineering services) in connection with any proposed construction project that is in support of a civilian energy or scientific research, development, and demonstration or related commercial application of energy technology program, project, or activity of the Department if the total estimated cost for such design does not exceed \$250,000.

(2) If the total estimated cost for construction design in connection with any construction project described in paragraph (1) exceeds \$250,000, funds for such design must be specifically authorized by law.

#### **SEC. 10. LIMITS ON USE OF FUNDS.**

(a) **CONSTRUCTION OF SPALLATION NEUTRON SOURCE PROJECT.**—None of the funds authorized by section 3(b)(11) may be obligated until—

(1) the Secretary certifies in writing to the Committee on Science of the House of Representatives and the Committee on Energy and Natural Resources of the Senate that senior project management positions for the project have been filled by qualified individuals; and

(2) the Secretary provides the Committee on Science and the Committee on Appropriations of the House of Representatives, and the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, with—

(A) a cost baseline and project milestones for each major construction and technical system activity, consistent with the overall cost and schedule submitted with the Department's fiscal year 2000 budget, that have been reviewed and certified by an independent entity, outside the Department and having no financial interest in the project, as the most cost-effective way to complete the project;

(B) binding legal agreements that specify the duties and obligations of each laboratory of the Department in carrying out the project;

(C) a revised project management structure that integrates the staff of the collaborating laboratories working on the project under a single project director, who shall have direct supervisory responsibility over the carrying out of the duties and obligations described in subparagraph (B); and

(D) official delegation by the Secretary of primary authority with respect to the project to the project director; and

(3) the Comptroller General certifies to the Congress that the total taxes and fees in any manner or form paid by the Federal Government on the Spallation Neutron Source and the property, activities, and income of the Department relating to the Spallation Neutron Source to the State of Tennessee or its counties, municipalities, or any other subdivision thereof, does not exceed the aggregate taxes and fees for which the Federal Government would be liable if the project were located in any other State that contains a national laboratory of the Department.

The Secretary shall report on the Spallation Neutron Source Project 99-E-334 annually, as part of the Department's annual budget submission, including a description of the achievement of milestones, a comparison of actual costs to estimated costs, and any changes in estimated project costs or schedule.

(b) **INTERNATIONAL THERMONUCLEAR EXPERIMENTAL REACTOR (ITER) ENGINEERING DESIGN ACTIVITIES (EDA).**—None of the funds authorized by this Act may be used either directly or indirectly for United States participation in International Thermonuclear Experimental Reactor (ITER) Engineering Design Activities (EDA).

(c) **OFFICE OF SCIENCE.**—None of the funds authorized by this Act may be used either directly or indirectly to fund the salary of an individual holding the position of Director or Deputy Director of the Office of Science, or Associate Director (except for the Office of Laboratory Policy and the Office of Resource Management), or Director, Office of Planning and Analysis within the Department's Office of Science unless such individual holds a postgraduate degree in science or engineering.

(d) **TRAVEL.**—Not more than 1 percent of the funds authorized by this Act may be used either directly or indirectly to fund travel costs of the Department or travel



costs for persons awarded contracts or subcontracts by the Department. As part of the Department's annual budget request submission to the Congress, the Secretary shall submit a report to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, that identifies—

- (1) the estimated amount of travel costs by the Department and for persons awarded contracts or subcontracts by the Department for the fiscal year of such budget submission, as well as for the 2 previous fiscal years;
- (2) the major purposes for such travel; and
- (3) the sources of funds for such travel.

(e) **TRADE ASSOCIATIONS.**—No funds authorized by this Act may be used either directly or indirectly to fund a grant, contract, subcontract, or any other form of financial assistance awarded by the Department to a trade association on a noncompetitive basis. As part of the Department's annual budget request submission to the Congress, the Secretary shall submit a report to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, that identifies—

- (1) the estimated amount of funds provided by the Department to trade associations, by trade association, for the fiscal year of such budget submission, as well as for the 2 previous fiscal years;
- (2) the services either provided or to be provided by each such trade association; and
- (3) the sources of funds for services provided by each such trade association.

(f) **REDUCTIONS.**—Notwithstanding any other provision of this Act—

- (1) each of the amounts authorized by this Act for fiscal year 2000 shall be reduced by 1 percent;
- (2) each of the amounts authorized by this Act for fiscal year 2000, as reduced pursuant to paragraph (1), shall be further reduced by .7674 percent, with such reduction representing a reduction in travel costs; and
- (3) each of the amounts authorized by this Act for fiscal year 2000 for administrative expenses, including program management, shall be further reduced proportionately to achieve additional savings of \$30,000,000.

#### **SEC. 11. MANAGEMENT AND OPERATING CONTRACTS.**

(a) **COMPETITIVE PROCEDURE REQUIREMENT.**—None of the funds authorized to be appropriated by this Act for civilian energy or scientific research, development, and demonstration or related commercial application of energy technology programs, projects, and activities may be used to award a management and operating contract for a federally owned or operated civilian energy laboratory of the Department unless such contract is awarded using competitive procedures or the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver.

(b) **CONGRESSIONAL NOTICE.**—At least 60 days before a contract award, amendment, or modification for which the Secretary intends to grant such a waiver, the Secretary shall submit to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, a report notifying the committees of the waiver and setting forth the reasons for the waiver.

#### **SEC. 12. FEDERAL ACQUISITION REGULATION.**

(a) **REQUIREMENT.**—None of the funds authorized to be appropriated by this Act for civilian energy or scientific research, development, and demonstration or related commercial application of energy technology programs, projects, and activities may be used to award, amend, or modify a contract of the Department in a manner that deviates from the Federal Acquisition Regulation, unless the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver.

(b) **CONGRESSIONAL NOTICE.**—At least 60 days before a contract award, amendment, or modification for which the Secretary intends to grant such a waiver, the Secretary shall submit to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, a report notifying the committees of the waiver and setting forth the reasons for the waiver.

#### **SEC. 13. REQUESTS FOR PROPOSALS.**

None of the funds authorized to be appropriated by this Act may be used by the Department to prepare or initiate Requests for Proposals (RFPs) for a civilian energy or scientific research, development, and demonstration or related commercial

application of energy technology program, project, or activity if the program, project, or activity has not been specifically authorized by Congress.

**SEC. 14. PRODUCTION OR PROVISION OF ARTICLES OR SERVICES.**

None of the funds authorized to be appropriated by this Act may be used by any civilian energy or scientific research, development, and demonstration or related commercial application of energy technology program, project, or activity of the Department to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Secretary determines that comparable articles or services are not available from a commercial source in the United States.

**SEC. 15. ELIGIBILITY FOR AWARDS.**

(a) **IN GENERAL.**—The Secretary shall exclude from consideration for grant agreements for civilian energy and scientific research, development, and demonstration or related commercial application of energy technology programs, projects, and activities made by the Department after fiscal year 1999 any person who received funds, other than those described in subsection (b), appropriated for a fiscal year after fiscal year 1999, under a grant agreement from any Federal funding source for a program, project, or activity that was not subjected to a competitive, merit-based award process, except as specifically authorized by this Act. Any exclusion from consideration pursuant to this section shall be effective for a period of 5 years after the person receives such Federal funds.

(b) **EXCEPTION.**—Subsection (a) shall not apply to the receipt of Federal funds by a person due to the membership of that person in a class specified by law for which assistance is awarded to members of the class according to a formula provided by law or under circumstances permitting other than full and open competition under the Federal Acquisition Regulation.

(c) **DEFINITION.**—For purposes of this section, the term “grant agreement” means a legal instrument whose principal purpose is to transfer a thing of value to the recipient to carry out a public purpose of support or stimulation authorized by a law of the United States, and does not include the acquisition (by purchase, lease, or barter) of property or services for the direct benefit or use of the United States Government. Such term does not include a cooperative agreement (as such term is used in section 6305 of title 31, United States Code) or a cooperative research and development agreement (as such term is defined in section 12(d)(1) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(d)(1))).

**SEC. 16. INTERNET AVAILABILITY OF INFORMATION.**

The Secretary shall make available through the Internet home page of the Department the abstracts relating to all research grants and awards made with funds authorized by this Act. Nothing in this section shall be construed to require or permit the release of any information prohibited by law or regulation from being released to the public.

**SEC. 17. FOREIGN VISITORS PROGRAM.**

(a) **PROHIBITION.**—Except as provided in subsection (b) or (c), the Secretary may not admit to any classified area of any federally owned or operated nonmilitary energy laboratory any individual who is a citizen of a nation that is named on the Department of Energy List of Sensitive Countries.

(b) **WAIVER AUTHORITY.**—(1) The Secretary may waive the prohibition in subsection (a) on a case-by-case basis with respect to individuals whose admission to a federally owned or operated nonmilitary energy laboratory is determined by the Secretary to be necessary for the furtherance of civilian science interests of the United States.

(2) Not later than 30 days after granting a waiver under paragraph (1), the Secretary shall transmit to the Committee on Science of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report in writing providing notice of the waiver. The report shall identify each individual for whom a waiver is granted and, with respect to each such individual, provide a detailed justification for the waiver and the Secretary’s certification that the admission of that individual to a federally owned or operated nonmilitary energy laboratory is necessary for the furtherance of civilian science interests of the United States.

(3) The authority of the Secretary under paragraph (1) may not be delegated.

(c) **APPLICATION.**—This section shall not apply to the Ames Laboratory, the Environmental Measurement Laboratory, the Ernest Orlando Lawrence Berkeley National Laboratory, the Federal Energy Technology Center, the Fermi National Accelerator Laboratory, the National Renewable Energy Laboratory, the Princeton Plas-

ma Physics Laboratory, the Radiological and Environmental Sciences Laboratory, the Stanford Linear Accelerator Center, or the Thomas Jefferson National Accelerator Facility.

## II. PURPOSE OF THE BILL

The purpose of H.R. 1655 is to authorize appropriations for fiscal years (FYs) 2000 and 2001 for the civilian energy and scientific research, development, and demonstration (RD&D) and related commercial application of energy technology programs, projects, and activities of the Department of Energy (DOE).

## III. BACKGROUND AND NEED FOR THE LEGISLATION

Three circumstances dictate the need for this legislation: (1) the importance of preserving and strengthening the Nation's scientific leadership; (2) the lack of specific authorizations for the bulk of the DOE's civilian energy and scientific RD&D and commercial application of energy technology activities under the Committee on Science's jurisdiction; and (3) the necessity to maintain discretionary budget caps.

In the next century, it is imperative that the United States maintains and improves its scientific, technical, and engineering base to sustain prosperity, meet the challenge of new ideas, and ensure a better quality of life for future generations. Notwithstanding the projections of budget surpluses, competition for scarce Federal discretionary resources by competing interests requires Congress to stress the fundamental importance of Federal science programs to the nation. In this fiscal environment, it is the view of the Committee on Science that funding for basic scientific research should take precedence over activities better conducted by the private sector, which tends to focus more on short-term, applied research.

Within this framework, the Committee on Science continues to support the goal of increasing research funding in a responsible manner. This means that increases must fall within the discretionary budget caps and be predicated upon the following five principles:

1. Federal RD&D must focus on programs that are long-term, high-risk, non-commercial, well-managed, and provide the potential for fruitful scientific advances.
2. Federal RD&D should hue closely to agency missions and be open to rigorous evaluations of quality and results.
3. Beyond the demonstration of technical feasibility, research providing incremental improvements in a product or process design, or associated with marketing and commercialization, should be left to the private sector.
4. Partnerships of all kinds should be encouraged to leverage scarce taxpayer dollars.
5. Infrastructure necessary for carrying out essential Federal RD&D programs needs to be prioritized consistent with program requirements.

The DOE is a major funding source for science—its Office of Science supports the Federal Government's third largest basic research program, exceeded in size only by the National Institutes of Health and the National Science Foundation. In addition, DOE supports major energy RD&D efforts, including solar and renew-

able energy, energy efficiency, fossil energy, and nuclear and fusion energy.

The general authority for these DOE activities lies in various statutes, including the Atomic Energy Act of 1954, as amended (P.L. 83-703), the Energy Reorganization Act of 1974 (P.L. 93-438), the Federal Nonnuclear Energy Research and Development Act of 1974 (P.L. 93-577), and the Department of Energy Organization Act (P.L. 95-91)—which established DOE in the Executive Branch on October 1, 1977, as a cabinet-level agency. Beyond this general authority, statutes such as the Energy Policy Act of 1992 (P.L. 102-486) authorize numerous specific RD&D activities. However, with 3 exceptions—Hydrogen Research,<sup>1</sup> Next Generation Internet,<sup>2</sup> and Renewable Indian Energy Resources<sup>3</sup>—very few of the Department’s civilian programs have specific authorizations. And nearly all such authorizations contained in the Energy Policy Act of 1992 either have or soon will expire. This circumstance, in and of itself, dictates a compelling need for a comprehensive authorization bill to provide guidance and direction to the Department that will preserve and strengthen the Nation’s science base and our energy future.

Under Rule X, clause 1(n)(1) of the Rules of the House, the Committee on Science has jurisdiction over “*all* bills, resolutions, and other matters relating to. \* \* \* [*all*] energy research, development, and demonstration, and projects therefor, \* \* \*” [emphasis added]. Similarly, under Rule X, clause 1(n)(4), the Committee has jurisdiction over environmental RD&D; under Rule X, clause 1(n)(6), the Committee has jurisdiction over the commercial application of energy technology; and under Rule X, clause 1(n)(14), the Committee has jurisdiction over scientific RD&D.

In 1997, the committee reported H.R. 1277, the DOE Civilian RD&D Authorization Act of 1997, which would have authorized specific sums for DOE’s civilian energy and scientific RD&D and related commercial application of energy technology programs for FYs 1998 and 1999. That bill was referred sequentially to the House Committee on Commerce, and was never acted on by the House because the two Committees could not resolve their jurisdictional differences. In the spirit of bipartisan cooperation to address the Commerce Committee’s concerns about H.R. 1277, the Science Committee has divided the DOE programs contained in H.R. 1277 into two bills: (1) this bill, H.R. 1655, which authorizes the DOE civilian energy and scientific RD&D and related commercial application of energy technology programs, projects, and activities that are under the sole jurisdiction of the Science Committee,<sup>4</sup> and (2) H.R. 1656, which authorizes those DOE commercial application of energy technology and related civilian energy and scientific RD&D

<sup>1</sup>Hydrogen Research is authorized at \$35.0 million for FY 2000 and at \$40.0 million for FY 2001 by the Hydrogen Future Act of 1996 (P.L. 104-271).

<sup>2</sup>NGI is authorized at \$25.0 million for FY 2000 by the Next Generation Internet Research Act of 1998 (P.L. 105-305).

<sup>3</sup>Renewable Indian Energy Resources is authorized at \$30.0 million for FY 2000–2003 by the Energy Conservation Reauthorization Act of 1998 (P.L. 105-388).

<sup>4</sup>H.R. 1655, as introduced, authorized only those DOE’s civilian energy and scientific RD&D and related commercial application of energy technology programs that the Committee on Commerce did not strike from H.R. 1277.

programs, projects, and activities that the Science Committee shares jurisdiction with the Commerce Committee.

As a result of bipartisan consultations with the Commerce Committee after the introduction of H.R. 1655, Mr. Calvert, Chairman of the Science Committee's Subcommittee on Energy and Environment, offered a manager's amendment on behalf of himself and Mr. Costello, Ranking Minority Member of the Subcommittee on Energy and Environment, that deleted the Field Operations, Oak Ridge Landlord and Building Technology, State, and Community Sector (nongrants) Management and Planning line items—items for which the Commerce Committee has now claimed joint jurisdiction.<sup>5</sup>

The Committee believes that this authorization bill—the Department of Energy Research, Development, and Demonstration Authorization Act of 1999—authorizes the DOE civilian energy and scientific RD&D and related commercial application of energy technology programs, projects, and activities that are under the sole jurisdiction of the Science Committee and meets the Committee's responsibilities to set priorities for good fundamental science and a balanced energy research portfolio that is vital to the Nation's future, while maintaining the discretionary budget caps.

#### IV. SUMMARY OF HEARINGS

The Subcommittee on Energy and Environment of the Committee on Science held hearings on March 3, March 10, March 24, and April 14, 1999 to hear testimony on the Administration's FY 2000 budget request for the civilian energy and scientific RD&D and related commercial application of energy technology programs, projects, and activities of the DOE.

Appearing as witnesses before the Subcommittee hearing on March 3, 1999, titled "Fiscal Year 2000 Budget Authorization Request: Department of Energy—Offices of Science; Environment, Safety and Health; and Environmental Management," were: Dr. Martha A. Krebs, Director, DOE Office of Science; Dr. David M. Michaels, DOE Assistant Secretary for Environment, Safety and Health (EH); Mr. Dan M. Berkovitz, DOE Deputy Assistant Secretary for Planning, Policy and Budget, Office of Environmental Management (EM); and Mr. Victor S. Rezendes, Director, Energy, Natural Resources, and Science Issues, Development Division, U.S. General Accounting Office (GAO).

Dr. Kregs testified on the \$2.85 billion request from the Office of Science. Her testimony included the following:

- DOE ranks second behind the Department of Defense in terms of the investment made in science by the Federal Government.
- Background and status of the Spallation Neutron Source (SNS), including some recent reviews of the project DOE has taken into account in planning the project.
- DOE hopes to use the Scientific Simulation Initiative to build computer and information technology for the second decade of the new century with the hope that the terascale computers developed

<sup>5</sup>The Field Operations, Oak Ridge Landlord and Building Technology, State, and Community Sector (nongrants) Management and Planning line items were included the Commerce Committee's reported version of H.R. 1277, thereby indicating that at that time the Commerce Committee agreed that these line items were the sole jurisdiction of the Science Committee.

will be used for numerous projects within DOE and the science community in general.

Dr. Michael's testimony on the \$50.8 million EH non-defense budget request discussed the following:

- In 1997 DOE decided to run pilot programs to determine the costs and benefits of external regulation, and subsequently intended to submit legislation to Congress that would externally regulate certain single-purpose energy research laboratories.
- The FY 1999 Energy and Water Development Appropriations Conference Report directed DOE not to begin any pilot projects that did not include the Nuclear Regulatory Commission (NRC), the Occupational Safety and Health Administration (OSHA), and other state and local bodies.
- These pilots have raised unexpected and as yet unresolved issues. With such issues outstanding, DOE does not feel comfortable in submitting single-purpose laboratory external-regulation legislation at this time. DOE, however, is still continuing with external regulation activities.
- Secretary of Energy Richardson designated the Integrated Safety Management (ISM) as the Department's safety policy and is continuing to take steps towards implementing ISM.
- EH is currently soliciting input from outside experts with the hope of addressing concerns by workers who claim that their health was put in jeopardy.

Mr. Berkovitz discussed the \$330 million non-defense request for EM and said the following:

- EM is responsible for cleaning up government-related nuclear energy research facilities that have accumulated over the past 50 years. In addition, EM is tasked with maintaining the safety and security of weapons-usable plutonium and radioactive spent nuclear fuel.
- EM has set a goal of cleaning up as many sites as possible by the year 2006. There are 48 sites left (down from 53 the previous year) and EM hopes to reduce that number to 42 by the end of FY 2000.
- EM uses technological innovations to contribute to clean-up and continues to research and develop new technologies to aide in the future.

Mr. Rezendes testified on the GAO review of the status of the SNS project and noted the following findings:

- DOE has not assembled a complete team with the necessary technical skills and experience to manage the project.
- The project is underspending its appropriations and has currently spent 60 percent of the planned budget.
- The project's cost and schedule estimates are not fully developed and thus do not represent a reliable estimate baseline. There is also an inadequate allowance for contingencies.
- DOE's complex management structure also creates problems for the SNS project.
- GAO reviewed 80 DOE projects from a 15-year period and found that only 15 were completed and 31 were terminated after spending \$10 billion.

Appearing as witnesses before the Subcommittee hearing on March 10, 1999, titled "Fiscal Year 2000 Budget Authorization Re-

quest: Department of Energy—Offices of Energy Efficiency and Renewable Energy; Fossil Energy; and Nuclear Energy, Science and Technology,” were: The Honorable Dan Reicher, DOE Assistant Secretary for Energy Efficiency and Renewable Energy (EERE); Mr. Robert Kripowicz, DOE Acting Assistant Secretary for Fossil Energy; and Mr. William Magwood, IV, Director, Office of Nuclear Energy, Science and Technology, U.S. Department of Energy.

Mr. Reicher discussed the EERE budget request of just over \$1 billion and claimed the following:

- Consumer savings have totaled more than \$33 billion since 1978 as a result of several DOE-supported technologies, and energy-intensive industries such as steel, glass, aluminum, and paper have saved \$2.1 billion because of energy-saving technologies.

- Renewable energy costs are down 80 percent since 1980.

- DOE wants to reduce energy use 50 percent in new homes and 30 percent in commercial buildings.

- The EERE budget request hopes to keep up this pace as well as reach the following goals: complete work on advanced industrial turbine; accelerate R&D for high efficiency vehicles; increase grants to states for energy work, increase weatherization funding; improve R&D on highly efficient and affordable buildings; and increase the use of coal mixed with biomass.

- Eleven percent of the Office of Power Technologies budget is earmarked, and 93 percent of the remaining funds are distributed on a competitive basis. The Office of Transportation Technologies is in the 70 to 80 percent competitive awards range and the Office of Industrial Technologies is near 100 percent.

- The next generation of turbines will allow for wind energy in the two to three cents per kilowatt hour range—down from 30 to 40 cents in 1980.

Mr. Kripowicz gave testimony justifying the \$364 million budget request by the Office of Fossil Energy (FE), which includes the following:

- FE has set as a priority the development of a virtually pollution-free power plant (named the Vision 21 Power Plant) in the 2015 timeframe. Also a key aspect in this project is higher efficiency resulting in lower costs and fewer emissions of greenhouse gases.

- Another priority of FE is research into carbon sequestration.

- Diversifying the future domestic supplies, including assuring adequate supplies of natural gas at reasonable prices and conducting more research into the potential of methane hydrates, is important.

- FE is also working to provide the technical assistance, including demonstrating improvements in both tools and techniques, as well as developing new technologies to keep oil flowing from the most threatened reserves, as it often costs more to pump out of the ground than it brings on the market. In most fields, only one-third or so of the oil has been produced.

- FE offered the deferral of \$246 million from the Clean Coal Technology Program because only two of the 40 projects in the program still require funding.

- Approximately 10 percent of the FE budget is earmarked; the remainder is awarded competitively.

Mr. Magwood discussed the Office of Nuclear Energy, Science and Technology (NE) civilian budget request of \$269.3 million, and gave the following justifications for the request:

- The U.S. remains a key international participant in the discussion over future application of nuclear technology. However, this position is in jeopardy as momentum from past accomplishments fades and the nuclear R&D infrastructure decays.
- NE's requested increase of \$25 million, as well as increases requested in their university programs, are geared toward keeping the U.S. in a leadership role of nuclear technology.
- NE also is proposing several new projects, including the Nuclear Energy Plant Optimization Program to ensure nuclear plants are safe and efficient over the next three decades and the Advanced Nuclear Medicine Initiative, part of the isotope program, to fight against cancer, arthritis, and other illnesses.
- NE is relying more than ever on outside advice in conducting nuclear R&D activity.
- DOE remains confident that the Electrometallurgical Treatment (EMT) project will continue after an independent review by the National Research Council even though the Administration has proposed cutting \$20 million, or one-fourth, of the project's funding.

Appearing as witnesses before the Subcommittee hearing on March 24, 1999, titled "Fiscal Year 2000 Budget Authorization Request: Department of Energy Results Act Implementation," were: The Honorable Gregory H. Friedman, DOE Inspector General, Ms. Susan D. Kladiva, Associate Director, Energy Resources, and Science Resources, Community, and Economic Development Division, U.S. General Accounting Office (GAO); Mr. John R. Sullivan, Director of Strategic Planning, Budget and Program Evaluation, DOE Office of Policy and International Affairs; and Ms. Gwendolyn Cowan, Director, Office of Procurement and Assistance Policy, DOE Office of Management and Administration.

Mr. Friedman testified on reviews conducted by the Office of Inspector General regarding DOE's implementation of the Government Performance and Results Act (Results Act) and discussed the following findings and recommendations:

- The Offices of Science, NE, and EERE have not integrated their planning, budgeting, and performance measures into a unified strategy. On the other hand, the Offices of Defense Programs and of Environmental Management (EM) have performed such an integration.

The Offices of Science, NE, and EERE also had limited success in developing results-oriented performance standards while the Office of Defense Programs and EM demonstrated significant progress in this area.

- None of the aforementioned offices adequately validated the estimated and actual costs used to measure performance, which is also a requirement of the Results Act.

The Office of Inspector General has offered the following recommendations to DOE: (1) enhance the links between overall strategic plan and its individual program office budget request; (2) require program offices to develop performance standards that are results-oriented, clear, measurable, and tied to projected resources;



and (3) require program managers to collect and validate both estimated and actual costs used in performance measures.

- DOE made significant use of the peer-review process to off-set problems in defining results and performance goals in areas such as basic research.

Ms. Kladiwa discussed GAO's observations concerning DOE's ability to implement GPRA, and noted the following:

- DOE's annual performance plan could be more useful if it better identified planned outcomes, presented information on individual offices' planned performance and requested funds, and described its verification and validation in more detail.

- While many of DOE's goals and measures clearly quantify planned performance, no baseline information is given, and therefore it is impossible to judge how much progress has been made.

- Some of DOE's annual goals and measures are vague and ambiguous and make it difficult to judge performance.

- DOE's measuring system is flawed because it allows DOE to rate incomplete work as successful.

- It is often difficult to associate an office's total planned performance with funds requested because of a complex matrix used by the Department.

Mr. Sullivan testified on DOE's efforts to comply with and implement the Results Act and discussed the following:

- The Department initiated its strategic management system in 1996 which allows it to perform the functions of planning, budgeting, program execution, and evaluation.

- The first performance agreement between the President and the Secretary was published for FY 1995 and the first annual performance report was released later in 1995; 1996 brought about the release of the first annual performance plan from the Department.

- The two main challenges remaining for DOE are refining and perfecting measures so that they represent outcomes, not outputs and ensuring that all Department activities, budgets, contracts, and plans clearly link to the strategic plan.

- DOE is planning on using the National Academy of Sciences report to learn how to shape and build their next strategic plan.

Ms. Cowan talked about the progress DOE had made regarding GPRA and also discussed DOE's procurement and financial assistance award activities. She noted that in 1994, the Department eliminated its unique competition policy, the result being that incidents of competition for major contracts has been greater in the subsequent four years than in any time in the Department's history.

The Subcommittee hearing of April 14, 1999, titled "Fiscal Year 2000 Climate Change Budget Authorization Request," examined the Administration's FY 2000 climate change budget proposals related to the Kyoto Protocol and the Protocol's requirement that the U.S. reduce its net greenhouse gas emissions by 7 percent below 1990 levels in the 2008–2012 timeframe—a reduction in projected U.S. carbon emissions of about 550 million metric tons, according to the most recent estimate of the Energy Information Administration (EIA) contained in its Annual Outlook 1999 (AEO99) report. The hearing also considered the U.S. Global Climate Change Research Program (USGCRP).

The Administration's FY 2000 climate change budget request totals \$4.142 billion, which includes: (1) \$200 million for an EPA "Clean Air Partnership Fund"; (2) \$1.368 billion for Climate Change Technology Initiative (CCTI) spending programs; (3) \$387 million for CCTI tax incentives; (4) \$400 million in other climate-related programs (DOE clean coal and natural gas, weatherization, and state energy grants); and (5) \$1.787 billion for the USGCRP.

Appearing as witnesses were: The Honorable Neal F. Lane, Assistant to the President for Science and Technology and Director, Office of Science and Technology Policy; The Honorable Dan W. Reicher, DOE Assistant Secretary for Energy Efficiency and Renewable Energy; The Honorable David M. Gardiner, EPA Assistant Administrator for Policy; and The Honorable Jay E. Hakes, EIA Administrator.

Dr. Lane testified on the Administration's FY 2000 budget requests for CCTI and USGCRP, and noted the following:

- CCTI is the Administration's response to a report issued from the President's Committee of Advisors on Science and Technology (PCAST), which concluded that the federal energy R&D programs were not commensurate in scope and scale with the energy challenges and opportunities for the 21st century. PCAST also warned that this shortfall could translate into higher dependence on imported oil, higher energy costs, smaller U.S. energy technology exports, worse air quality than would otherwise be the case, and the diminished capacity to reduce greenhouse gas emissions cost effectively.
- U.S. climate change science is largely supported by the \$1.8 billion FY 2000 budget request of the USGCRP. This request includes a new Carbon Cycle Science Initiative and the U.S. climate modeling effort.
- The climate change issue requires two issues to be addressed: (1) a sustained and enhanced commitment to energy research, development, and deployment; and (2) continued research into the science of climate change.

Mr. Reicher testified on the DOE's FY 2000 climate change budget request of approximately \$1.1 billion, and Mr. Gardiner discussed EPA's role in CCTI and its FY 2000 budget requests of \$216 million for CCTI and \$200 million for a Clean Air Partnership Fund.

Finally, Dr. Hakes gave testimony on the EIA report, Analysis of The Climate Change Technology Initiative, which was conducted at the request of Science Committee Chairman Sensenbrenner and Ranking Minority Member George Brown, Jr. The EIA analysis predicts that the CCTI tax incentives would only reduce projected U.S. carbon emissions in 2010 by 3.1 million metric tons, or 0.17 percent. The EIA also found that while research, development, and deployment programs also have benefits in reducing carbon emissions, it is not possible to link program expenditures directly to program results or to separate the impacts of incremental funding requested for FY 2000 from ongoing program expenditures. In addition, Dr. Hakes testified that the current EIA AE099 estimates already include the impacts of ongoing research and development.

## V. COMMITTEE ACTIONS

As summarized above, the Subcommittee on Energy and Environment of the Committee on Science heard testimony relevant to the program authorized in H.R. 1655 at hearings held on March 3, March 10, March 24, and April 14, 1999.

On May 3, 1999, Mr. Ken Calvert, Chairman of the Subcommittee on Energy and Environment, introduced H.R. 1655, the Department of Energy Research, Development, and Demonstration Authorization Act of 1999, a bill to authorize appropriations for FY 2000 and FY 2001 for the energy and scientific R&D and related commercial application of energy technology programs, projects, and activities of the DOE.

The Committee on Science met to consider H.R. 1655 on Tuesday, May 25, 1999, and entertained the following amendments and report language.

*Amendment 1.*—Mr. Calvert, Chairman of the Science Committee's Subcommittee on Energy and Environment, offered a manager's amendment on behalf of himself and Mr. Costello, Ranking Minority Member of the Subcommittee on Energy and Environment, that: (1) made technical and conforming changes to H.R. 1655, as introduced; (2) added reporting requirements to the provisions in the bill dealing with Fossil Energy and Energy Efficiency Initiatives; (3) clarified the intent of the "Limitations on Demonstrations" section; (4) raised the limits on the provisions dealing with General Plant Projects, Construction Projects, Authority for Conceptual and Construction Designs; (5) clarified the intent of the "Production or Provision of Articles or Services" and the "Eligibility of Awards" sections; and (6) and struck the prohibitions on the use of funds for DOE's High Performance Computing and Communications (HPCC) program and Scientific Simulation Initiative (SSI), with the understanding that they would be addressed in report language and subsequent legislation. And, as a result of bipartisan consultations with the Commerce Committee, the manager's amendment also deleted the Field Operations, Oak Ridge Landlord and Building Technology, State, and Community Sector (nongrants) Management and Planning line items.

*Amendment 2.*—Mr. Rohrabacher offered an amendment making available, within funds authorized for Concentrating Solar Power, \$2.0 million for FY 2000 and \$3.0 million for FY 2001 for experimental beamed power technology demonstrations. The amendment was adopted by voice vote.

*Amendment 3.*—Mr. Gutknecht offered an amendment making available, within funds authorized for Fuel Utilization R&D, \$2.5 million for FY 2000 and \$2.75 million for FY 2001 for biodiesel fuel R&D. The amendment was adopted by voice vote.

*Amendment 4.*—Mr. Doyle offered an amendment to insert a new section establishing a gas hydrate energy and scientific and environmental R&D program within DOE. The amendment included the authorization of \$5.0 million for FY 2000 and \$7.5 million for FY 2001 for the new program within the \$107,916,000 for FY 2000 and \$108,831,000 for FY 2001 authorized under section 3(c)(3) for Gas. The amendment was adopted by voice vote.

*Amendment 5.*—Mr. Udall offered an amendment to add \$49.9 million for FY 2000 and \$52.0 million for FY 2001 for various Solar and Renewable Resources Technologies programs, and \$99.0 million for FY 2000 and \$103.5 million for FY 2001 to various Energy Conservation R&D line items. The amendment was rejected by a recorded vote of 17 ayes to 20 noes.

*Amendment 6.*—Ms. Woolsey offered an amendment to Mr. Udall's amendment (Amendment 5) that would provide \$33.5 million for FY 2000 and \$35.0 million for FY 2001 for Geothermal. The amendment was rejected by a recorded vote of 16 ayes to 19 noes.

*Amendment 7.*—Mr. Costello offered an amendment to authorize \$150.0 million for FY 2000 for the construction of Project 99-E-334, the SNS at Oak Ridge National Laboratory, offset by \$150.0 million in reductions in funding to various programs for FY 2000 and FY 2001, and subject to a number of limitations. The amendment was rejected by a recorded vote of 17 ayes to 17 noes.

*Amendment 8.*—Ms. Eddie Bernice Johnson's amendment, cosponsored by Mr. Wu, Mr. Doyle, and Mr. Capuano, and which was withdrawn, would have stricken subsections 9(a) and 9(b) of the bill prohibiting the use of any of the funds authorized by the Act for DOE's HPCC program or SSI.

*Amendment 9.*—Ms. Biggert offered an amendment requiring the Secretary of Energy to make available through DOE's Internet home page abstracts relating to all research grants and awards made with funds authorized by this Act, with the proviso that nothing in the amendment shall be construed to require or permit the release of any information prohibited by law or regulation from being released to the public. The amendment was adopted by voice vote.

*Amendment 10.*—Mr. Nethercutt offered an amendment prohibiting the Secretary of Energy from admitting to any classified area of any federally owned or operated nonmilitary energy laboratory—except for Ames Laboratory, the Environmental Measurement Laboratory, Lawrence Berkeley National Laboratory, the Federal Energy Technology Center, the Fermi National Accelerator Laboratory, the National Renewable Energy Laboratory, the Princeton Plasma Physics Laboratory, the Radiological and Environmental Sciences Laboratory, the Stanford Linear Accelerator Center, and the Thomas Jefferson National Accelerator Facility—an individual who is a citizen of a nation that is named on the DOE List of Sensitive Countries. The Secretary may waive the prohibition on a case-by-case basis if he or she determines that such access is necessary for the furtherance of civilian science interests of the U.S., and, within 30 days after granting the waiver submits a report justifying the waiver to the House Science Committee and to the Senate Committee on Energy and Natural Resources. The amendment was adopted by voice vote.

*Amendment 11.*—Mr. Costello offered an amendment to the amendment by Mr. Nethercutt (Amendment 10) prohibiting the Secretary of Energy from admitting to any classified facility of any DOE Laboratory, or to any facility of any DOE Laboratory to discuss sensitive subject material, an individual who is a citizen of a nation that is named on the DOE List of Sensitive Countries. Mr.

Calvert raised a point of order that the amendment was not germane to the bill and the Chair sustained the point order.

*Amendment 12.*—Mr. Cook and Ms. Woolsey offered an amendment to provide \$33.5 million for FY 2000 and \$35.0 million for FY 2001 for Geothermal, of which \$4.0 million for FY 2001 and \$4.615 million for FY 2001 shall be derived from savings resulting from reductions in contractor travel pursuant to section 9(f). The amendment was adopted by a voice vote.

*Amendment 13.*—Mr. Gordon offered an amendment to authorize \$100.0 million for FY 2000 for the construction of Project 99-E-334, the SNS at Oak Ridge National Laboratory, offset by \$100.0 million in reductions in funding to various programs for FY 2000, and subject to a number of limitations. The amendment was adopted by a recorded vote of 29 ayes to 0 noes.

*Report Language 1.*—Mr. Brady offered report language regarding the DOE's Industries of the Future program. The report language was adopted by voice vote.

*Report Language 2.*—Mr. Calvert asked and received unanimous consent that the budget tables for H.R. 1655 be included in the bill's report language and that staff be permitted to make technical corrections to the table.

Mr. Hall asked and received unanimous consent that the minority be given the opportunity to examine the budget tables in detail and negotiate over their content, and that upon completion of negotiations a final version be signed by a majority of the Committee, and that thereafter the minority have two subsequent days to file any minority supplemental or additional views.

With a quorum present, Mr. Costello moved that the Committee favorably report the bill, H.R. 1655, as amended, to the House with the recommendation that the bill as amended do pass, that the staff be instructed to prepare the legislative report and make necessary technical and conforming changes, and that the Chairman take all necessary steps to bring the bill before the House for consideration. The motion was adopted by a recorded vote of 31 ayes and 1 no.

Mr. Sensenbrenner asked and received unanimous consent that: (1) Members have two subsequent calendar days in which to submit supplemental, minority or additional views on the measure; (2) pursuant to clause 1 of Rule XXII of the Rules of the House of Representatives, the Chairman may offer such motions as may be necessary in the House to go to conference with the Senate on H.R. 1655 or a similar Senate bill; (3) staff be given authority to make technical and conforming changes; and (4) the bill be reported in the form of a single amendment in the nature of a substitute reflecting amendments adopted.

## VI. SUMMARY OF MAJOR PROVISIONS OF THE BILL

As shown in Tables 1 and 2 below, H.R. 1655 authorizes to be appropriated to the Secretary of Energy for DOE civilian energy and scientific RD&D and related commercial application of energy technology programs, projects, and activities \$3,877,903,000 for FY 2000 and \$4,098,770,000 for FY 2001, of which—(1) \$432,366,000 for FY 2000 and \$452,577,000 for FY 2001 is for Energy Supply; (2) \$2,657,761,000 for FY 2000 and \$2,691,465,000 for FY 2001 is

for Science; (3) \$397,564,000 for FY 2000 and \$427,102,000 for FY 2001 is for Fossil Energy R&D; and (4) \$490,212,000 for FY 2000 and \$527,626,000 for FY 2001 is for Energy Conservation R&D.

Other provisions of the bill include the following:

- Establishes a Gas Hydrate energy and scientific and environment R&D program within DOE.
- Limits the amounts of funds that may be reprogrammed.
- Limits DOE funding for civilian or scientific or related commercial application of energy technology demonstration programs, projects, or activities to technologies and processes that can be reasonably expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.
- Limits funding for general plant and construction projects that overrun costs and amounts that may be spent for conceptual and construction design of a construction project in the absence of a specific authorization.
- Prohibits the obligation of any funds authorized for the construction of the SNS at Oak Ridge National Laboratory until: (1) the Secretary certifies that senior project management positions for the project have been filled by qualified individuals; (2) the Secretary provides: (A) a cost baseline and project milestones for each major construction and technical system activity; (B) binding legal agreements that specify the duties and obligations of each DOE laboratory carrying out the project; (c) a revised project management structure that integrates the staff of the collaborating laboratories working on the project under a single project director; and (D) official delegation by the Secretary of primary authority with respect to the project to the project director; and (3) the Comptroller General certifies to the Congress that the total taxes and fees paid by the Federal Government on the SNS does not exceed the aggregate taxes and fees for which the Federal Government would be liable if the project were located in any other State that contains a national laboratory of the Department. The Secretary also is required to report on the SNS project as part of the Department's annual budget submission.
- Prohibits funds authorized by this Act to be used either directly or indirectly for either U.S. participation in the International Thermonuclear Experimental Reactor (ITER) Engineering Design Activities (EDA), or to fund the salary of an individual holding the position of Director or Deputy Director of the Office of Science, or Associate Director (except for the Office of Laboratory Policy or Office Resource Management), or Director, Office of Planning and Analysis within the Department's Office of Science unless such individual holds a postgraduate degree in science or engineering.
- Provides that not more than 1 percent of the funds authorized by this Act may be used either directly or indirectly to fund travel costs of the Department or travel costs for its contractors or subcontractors. As part of the Department's annual budget request submission to the Congress, the Secretary must submit a report identifying travel costs, the purposes of such travel, and the sources of the funds used.
- Provides that no funds authorized by the act may be used either directly or indirectly to fund a grant, contract, subcontract or any other form of financial assistance awarded by the Department

to a trade association on a noncompetitive basis. As part of the Department's annual budget request submission to the Congress, the Secretary shall also submit a report identifying the amount of funds provided to trade associations, the services provided, and the sources of the funds used.

- Prohibits DOE from using any funds authorized by the bill to: (1) award a management and operating contract for one of its federally owned or operated civilian energy laboratories unless the Secretary of Energy grants a case-by-case waiver and reports to Congress; (2) award, amend, or modify a contract that deviates from the Federal Acquisition Regulation (FAR), unless the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation and reports to Congress on the reasons for the waiver; (3) prepare or initiate Requests for Proposals (RFPs) for unauthorized programs, projects or activities; or (4) produce or provide articles or services for the purpose of selling them to a person outside the Federal Government, unless the Secretary of Energy determines that comparable articles or services are not available from a commercial source in the U.S.

- Excludes from consideration for grant agreements made after 1999 by the DOE for a period of five years any person who received funding for a project not subject to a competitive, merit-based award process, except as specifically authorized by the bill.

- Requires the Secretary of Energy to make available through DOE's Internet home page the abstracts relating to all research grants and awards made with funds authorized by the bill.

- Prohibits the Secretary of Energy from admitting to any classified area of any federally owned or operated nonmilitary energy laboratory—except for Ames Laboratory, the Environmental Measurement Laboratory, Lawrence Berkeley National Laboratory, the Federal Energy Technology Center, the Fermi National Accelerator Laboratory, the National Renewable Energy Laboratory, the Princeton Plasma Physics Laboratory, the Radiological and Environmental Sciences Laboratory, the Stanford Linear Accelerator Center, and the Thomas Jefferson National Accelerator Laboratory—an individual who is a citizen of a nation that is named on the DOE List of Sensitive Countries, unless the Secretary waives the prohibition on a case-by-case basis if he or she determines that such access is necessary for the furtherance of civilian science interests of the U.S., and within 30 days after granting the waiver submits a report justifying the waiver to the House Science Committee and to the Senate Committee on Energy and Natural Resources.

TABLE 1. H.R. 1655—THE DEPARTMENT OF ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT OF 1999: SUMMARY

[Dollars in thousands]

Program/Activity	FY 1999 appropriation	FY 2000 request	FY 2000 recommendation	FY 2000 recommendation compared with (+ or –) FY 1999 appropriation	FY 2001 recommendation	FY 2001 recommendation compared with (+ or –) FY 2000 recommendation
Energy Supply Budget Authority .....	418,160	511,226	467,366	+49,206	492,577	+25,211
Less Hydrogen Research Budget Authority/Authorization (P.L. 104–271 and P.L. 105–245) .....	– 22,250	– 28,000	– 35,000	– 12,750	– 40,000	– 5,000
Total, Energy Supply Budget Authorization .....	395,910	483,226	432,366	+36,456	452,577	+20,211
Science Core Budget Authority/Authorization .....	2,449,685	2,436,402	2,539,861	+90,176	2,678,365	+138,504
Spallation Neutron Source (SNS) Budget Authority Authorization .....	130,000	214,000	117,900	– 12,100	13,100	– 104,800
HPCC, NGI, SSI Budget Authority <sup>1</sup> .....	125,775	184,991	25,000	– 100,775	0	– 25,000
Subtotal, Science Budget Authority .....	2,705,460	2,835,393	2,682,761	– 22,699	2,691,465	+8,704
Use of Prior Year Balances/Other Adjustments .....	– 7,600	0	0	+7,600	0	0
Total, Science Budget Authority .....	2,697,860	2,835,393	2,682,761	– 15,099	2,691,465	+8,704
Less Next Generation Internet (NGI) (P.L. 105–277 and P.L. 105–305) <sup>1</sup> .....	– 14,602	– 14,602	– 25,000	– 10,398	0	+25,000
Total, Science Budget Authorization .....	2,683,258	2,802,791	2,657,761	– 25,497	2,691,465	+33,704



Fossil Energy Research and Development Budget Authority/Authorization .....	373,056	354,000	397,564	+24,508	427,102	+29,538
Energy Conservation Research and Development Budget Authority/Authorization .....	465,732	562,484	490,212	+24,480	527,626	+37,414
Subtotal 1, H.R. 1655 Budget Authorization .....	3,917,956	4,220,501	3,977,903	+59,947	4,098,770	+120,867
Less 1 Percent of Subtotal 1 Authorized for FY 2000 .....	0	0	-39,779	-39,779	0	+39,779
Subtotal 2, H.R. 1655 Budget Authorization .....	3,917,956	4,220,501	3,938,124	+20,168	4,098,770	+160,646
Less 0.7674 Percent of Subtotal 2 Authorized for FY 2000 Representing a Reduction in Travel Costs .....	0	0	-30,221	-30,221	0	+30,221
Less \$30,000,000 for Administrative Expenses for FY 2000 .....	0	0	-30,000	-30,000	0	+30,000
Total, H.R. 1655 Budget Authorization .....	3,917,956	4,220,501	3,877,903	-40,053	4,098,770	+220,867
Existing Authorizations:						
Hydrogen Research (P.L. 104-271 and P.L. 105-245) .....	22,250	28,000	35,000	+12,750	40,000	+5,000
Next Generation Internet (NGI) (P.L. 105-277 and 105-305) <sup>1</sup> .....	14,602	14,602	25,000	+10,398	0	-25,000
Total, H.R. 1655 Budget Authority .....	3,954,808	4,263,103	3,937,903	-16,905	4,138,770	+200,867

<sup>1</sup>Excluded from this authorization legislation is DOE's High Performance Computing and Communications (HPCC) and NGI programs and its activities under the proposed Information Technology for the 21st Century (IT2) Initiative—the Scientific Simulation Initiative (SSI). The lack of authorization for these programs in H.R. 1655 should not be construed as a lack of endorsement of these programs. It is the Chairman's intention or the Committee to act on separate legislation that will authorize appropriations for the HPCC Program—including DOE's portion—as well as the proposed IT2 Initiative and further NGI activities for those agencies under the Committee's jurisdiction.

TABLE 2. H.R. 1655—THE DEPARTMENT OF ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT OF 1999

[Dollars in thousands]

Program/Activity	FY 1999 appropriation	FY 2000 request	FY 2000 recommendation	FY 2000 rec- ommendation compared with (+ or –) FY 1999 appropria- tion	FY 2001 recommendation	FY 2001 rec- ommendation compared with (+ or –) FY 2000 rec- ommendation
Energy Supply Summary						
Solar and Renewable Resources Technologies Budget Authority .....	327,221	398,921	351,624	+24,403	365,321	+13,697
Less Hydrogen Research Budget Authority/Authorization (P.L. 104–271 and P.L. 105–245) .....	– 22,250	– 28,000	– 35,000	– 12,750	– 40,000	– 5,000
Solar and Renewable Resources Technologies Budget Authorization .....	304,971	370,921	316,624	+11,653	325,321	+8,697
Nuclear Energy Budget Authority/Authorization .....	91,462	112,305	115,742	+24,280	127,256	+11,514
Subtotal, Energy Supply Budget Authorization .....	396,433	483,226	432,366	+35,933	452,577	+20,211
Use of Prior Year Balances/Other Adjustments .....	– 523	0	0	+523	0	0
Total, Energy Supply Budget Authorization .....	395,910	483,226	432,366	+34,456	452,577	+20,211
Total, Energy Supply Budget Authority .....	418,160	511,226	467,366	+49,206	492,577	+25,211
ENERGY SUPPLY						
Solar and Renewable Resources Technologies						
Solar:						
Solar Building Technology Research .....	3,600	5,500	3,708	+108	3,819	+111
Photovoltaic:						
Photovoltaic: .....	72,200	93,309	83,345	+11,145	85,845	+2,500
Photovoltaic Energy Research .....	2,883	2,847	3,027	+144	3,179	+151
Total, Photovoltaic .....	75,083	96,156	86,372	+11,289	89,024	+2,652
Concentrating Solar Power:						
Experimental Beamed Power Technology Demonstrations .....	0	0	2,000	+2,000	3,000	+1,000
Other Concentrations Solar Power .....	17,000	18,850	15,510	– 1,490	15,035	– 475
Total, Concentrating Solar Power .....	17,000	18,850	17,510	+510	18,035	+525
Biomass/Biofuels:						
Power Systems .....	31,450	38,950	32,394	+944	33,365	+972
Transportation .....	41,750	53,441	43,003	+1,253	44,293	+1,290

Total, Biomass/Biofuels Energy Systems .....	73,200	92,391	75,396	+2,196	77,658	+2,262
Biomass/Biofuels Energy Research .....	27,199	26,740	28,559	+1,360	29,987	+1,428
Total, Biomass/Biofuels .....	100,399	119,131	103,955	+3,556	107,645	+3,690
Wind:						
Wind Energy Systems .....	34,771	45,600	35,814	+1,043	36,889	+1,074
Wind Energy Research .....	283	283	297	+14	312	+15
Total, Wind .....	35,054	45,883	36,111	+1,057	37,201	+1,090
Renewable Energy Production Incentive Program .....	4,000	1,500	1,500	-2,500	1,500	0
Solar Program Support .....	0	10,000	0	0	0	0
International Solar Energy program .....	6,350	6,000	6,000	-350	6,000	0
National Renewable Energy Laboratory .....	3,900	1,100	1,100	-2,800	1,100	0
Solar Photoconversion .....	14,532	14,260	15,259	+727	16,022	+763
Total, Solar .....	259,918	318,380	271,515	+11,597	280,346	+8,831
Geothermal .....	28,500	29,500	33,500	+5,000	35,000	1,500
Hydrogen:						
Hydrogen Research (P.L. 104-271 and P.L. 105-245) .....	22,250	28,000	35,000	+12,750	40,000	+5,000
Hydrogen Energy Research .....	3,008	2,970	3,158	+150	3,316	+158
Total, Hydrogen Research .....	25,258	30,970	38,158	+12,900	43,316	+5,158
Hydropower .....	3,250	7,000	3,348	+98	3,448	+100
Electric Energy Systems and Storage .....	40,100	41,000	41,303	+1,203	42,542	+1,239
Program Direction .....	18,100	19,171	18,100	0	18,100	0
Subtotal, Solar and Renewable Resources Technologies Budget Authority .....	375,126	446,021	405,924	+30,798	422,752	+16,828
Less Renewable Energy Research Program .....	-47,905	-47,100	-50,300	-2,395	-52,816	-2,516
Less Savings Resulting from Contractor Travel to be Applied to Geothermal .....	0	0	-4,000	-4,000	-4,615	-615
Total, Solar and Renewable Resources Technologies Budget Authority .....	327,221	398,921	351,624	+24,403	365,321	+13,697
Less Hydrogen Research Budget Authority/Authorization (P.L. 104-271 and P.L. 105-245) .....	-22,250	-28,000	-35,000	-12,750	-40,000	-5,000
Total, Solar and Renewable Resources Technologies Budget Authorization .....	304,971	370,921	316,624	+11,653	325,321	+8,697
Nuclear Energy:						
Nuclear Energy R&D:						
Advanced Radioisotope Power System .....	37,000	37,000	37,000	0	37,000	0
Test Reactor Area Landlord:						
Operation and Maintenance .....	4,000	6,070	6,070	+2,070	6,070	0

TABLE 2. H.R. 1655—THE DEPARTMENT OF ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT OF 1999—Continued

[Dollars in thousands]

Program/Activity	FY 1999 appropriation	FY 2000 request	FY 2000 recommendation	FY 2000 rec- ommendation compared with (+ or –) FY 1999 appropria- tion	FY 2001 recommendation	FY 2001 rec- ommendation compared with (+ or –) FY 2000 rec- ommendation
Construction:						
99–E–200 Electrical Utility Upgrade, Idaho National Engineering and Environmental Lab- oratory .....	341	1,430	1,430	+1,089	1,944	+514
95–E–201 Fire and Life Safety Improvements, Idaho National Engineering and Environ- mental Laboratory .....	2,425	1,500	1,500	– 925	2,500	+1,000
Total, Construction .....	2,766	2,930	2,930	+164	4,444	+1,514
Total, Test Reactor Area Landlord .....	6,766	9,000	9,000	+2,234	10,514	+1,514
University Reactor Fuel Assistance and Support .....	11,000	11,345	13,500	+2,500	16,000	+2,500
Nuclear Energy Plant Optimization .....	0	5,000	5,000	+5,000	7,500	+2,500
Nuclear Energy Research Initiative .....	19,000	25,000	30,000	+11,000	35,000	+5,000
Total, Nuclear Energy R&D .....	73,766	87,345	94,500	+20,734	106,014	+11,514
Program Direction .....	21,242	24,960	21,242	0	21,242	0
Subtotal, Nuclear Energy .....	95,008	112,305	115,742	+20,734	127,256	+11,514
Use of Prior Year Balances .....	– 3,546	0	0	+3,546	0	0
Total, Nuclear Energy Budget Authority/Authorization .....	91,462	112,305	115,742	+24,280	127,256	+11,514
Subtotal, Energy Supply Budget Authorization .....	396,433	483,226	432,366	+35,933	452,577	+20,211
Use of Prior Year Balances/Other Adjustments .....	– 523	0	0	+523	0	0
Total, Energy Supply Budget Authorization .....	395,910	483,226	432,366	+36,456	452,577	+20,211
Hydrogen Research Budget Authority/Authorization (P.L. 104–271 and P.L. 105–245) .....	22,250	28,000	35,000	+12,750	40,000	+5,000
Total, Energy Supply Budget Authority .....	418,160	511,226	467,366	+49,206	492,577	+25,211
SCIENCE SUMMARY						
Science Core:						
High Energy Physics .....	693,916	697,090	715,090	+21,174	753,110	+38,020

Nuclear Physics .....	333,779	342,940	357,214	+23,435	375,600	+18,386
Biological and Environmental Research (BER) Core .....	432,890	401,408	413,674	-19,216	434,357	+20,683
Basic Energy Sciences (BES) Core .....	665,522	667,256	698,800	+33,278	733,740	+34,940
Computational and Technology Research (CTR) Core .....	30,123	31,474	31,474	+1,351	32,333	+859
Energy Research Analysis .....	908	1,000	1,000	+92	1,000	0
Multiprogram Energy Labs—Facility Support .....	21,247	21,260	22,309	+1,062	23,425	+1,116
Fusion Energy Sciences .....	221,500	222,614	250,000	+28,500	275,000	+25,000
Science Core Program Direction .....	49,800	51,360	49,800	0	49,800	0
Total, Science Core Budget Authority .....	2,449,685	2,436,402	2,539,361	+89,676	2,678,365	+139,004
Other Science:						
Spallation Neutron Source (SNS) Budget Authority/Authorization .....	130,000	214,000	117,900	-12,100	13,000	-104,800
HPCC, NGI, and SSI Budget Authority/Authorization¹ .....	125,775	184,991	25,000	-100,775	0	-25,000
Total, Other Science Budget Authority/Authorization .....	255,775	398,991	142,900	-112,875	13,100	-129,800
Subtotal, Science Budget Authority .....	2,705,460	2,835,393	2,682,761	-22,699	2,691,465	+8,704
Use of Prior Year Balance/Other Adjustments .....	-7,600	0	0	+7,600	0	0
Total, Science Budget Authority .....	2,697,860	2,835,393	2,682,761	-15,099	2,691,465	+8,704
Less Next Generation Internet (NGI) (P.L. 105-277 and P.L. 105-305)¹ .....	-14,602	-14,602	-25,000	-10,398	0	+25,000
Total, Science Budget Authorization .....	2,683,258	2,820,791	2,657,761	-25,497	2,691,465	+33,704
High Energy Physics:						
Operation and Maintenance:						
Research and Technology .....	214,891	227,190	235,190	+20,299	246,950	+11,760
Facility Operations .....	459,635	441,200	451,200	-8,435	473,760	+22,560
Total, Operation and Maintenance .....	674,526	668,390	686,390	+11,864	720,710	+34,320
Construction:						
00-G-307 Research Office Building, Stanford Linear Accelerator Center .....	0	2,000	2,000	+2,000	5,200	+3,200
99-G-306 Wilson Hall Safety Improvements Project, Fermilab .....	6,700	4,700	4,700	-2,000	4,200	-500
98-G-304 Neutrinos at the Main Injector (NuMI), Fermilab .....	14,300	22,000	22,000	+7,700	23,000	+1,000
Total, Construction .....	21,000	28,700	28,700	+7,700	32,400	+3,700
Subtotal, High Energy Physics .....	695,526	697,090	715,090	+19,564	753,110	+38,020
Use of Prior Year Balances .....	-1,610	0	0	+1,610	0	0
Total, High Energy Physics .....	693,916	697,090	715,090	+21,174	753,110	+38,020

TABLE 2. H.R. 1655—THE DEPARTMENT OF ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT OF 1999—Continued

[Dollars in thousands]

Program/Activity	FY 1999 appropriation	FY 2000 request	FY 2000 recommendation	FY 2000 rec- ommendation compared with (+ or -) FY 1999 appropria- tion	FY 2001 recommendation	FY 2001 rec- ommendation compared with (+ or -) FY 2000 rec- ommendation
Nuclear Physics:						
Operation and Maintenance:						
Medium Energy Nuclear Physics .....	118,543	111,130	124,470	+5,927	130,694	+6,224
Heavy Ion Nuclear Physics .....	150,407	181,810	181,810	+31,403	190,901	+9,091
Low Energy Nuclear Physics .....	33,225	34,170	34,886	+1,661	36,631	+1,744
Nuclear Theory .....	15,760	15,830	16,548	+788	17,375	+827
Total, Operation and Maintenance .....	317,935	342,940	357,714	+39,779	375,600	+17,886
Construction:						
91–G–3000 Relativistic Heavy Ion Collider, Brookhaven National Laboratory .....	16,620	0	0	-16,620	0	0
Total, Construction .....	16,620	0	0	-16,620	0	0
Subtotal, Nuclear Physics .....	334,555	342,940	357,714	+23,159	375,600	+17,886
Use of Prior Year Balances .....	-776	0	0	+776	0	0
Total, Nuclear Physics .....	333,779	342,940	357,714	+23,935	375,600	+17,886
Biological and Environmental Research (BER):						
BER Congressional Directives .....	42,713	0	0	-42,713	0	0
Other BER .....	393,975	411,170	413,674	+19,699	434,357	+20,684
Less Scientific Simulation Initiative (SSI) <sup>1</sup> .....	0	-9,762	0	0	0	0
Subtotal, BER Core .....	436,688	401,408	413,674	-23,014	434,357	+20,684
Use of Prior Year Balances .....	-3,798	0	0	+3,798	0	0
Total, Biological and Environmental Research .....	432,890	401,408	413,674	-19,216	434,357	+20,684
Basic Energy Sciences (BES):						
Material Sciences:						
Materials Sciences .....	414,686	407,636	423,290	+8,604	438,760	+15,470
Less Spallation Neutron Source (SNS) R&D .....	-28,600	-17,900	-17,900	+10,700	-13,100	+4,800
Total, Materials Sciences Core .....	386,086	389,736	405,390	+19,304	425,660	+20,270

Chemical Sciences:						
Chemical Sciences .....	206,837	215,577	217,179	+10,342	228,038	+10,859
Less Scientific Simulation Initiative (SSN) <sup>1</sup> .....	0	-6,828	0	0	0	0
Total, Chemical Sciences Core .....						
206,837	208,749	217,179	+10,342	228,038	+10,859	
Engineering and Geosciences:						
Engineering Research .....	17,924	14,876	18,820	+896	19,761	+941
Geosciences Research .....	24,815	22,669	26,056	+1,241	27,359	+1,303
Total, Engineering and Geosciences .....						
42,739	37,545	44,876	+2,137	47,120	+2,244	
Energy Biosciences .....	29,862	31,226	31,355	+1,493	32,923	+1,568
Construction: 96-E-300 Combustion Research Facility, Sandia National Laboratories-Livermore .....	4,000	0	0	-4,000	0	0
Subtotal, BES Core .....						
669,524	667,256	698,800	+29,276	733,740	+34,940	
Use of Prior Year Balances .....	-4,002	0	0	+4,002	0	0
Total, BES Core .....						
665,522	667,256	698,800	+33,278	733,740	+34,940	
Computational and Technology Research (CTR):						
Mathematical, Information, and Computational Sciences (MICS):						
MICS .....	138,834	184,575	42,174	-96,660	18,033	+24,141
Less NGL Budget Authority/Authorization (P.L. 105-277 and P.L. 105-305) <sup>1</sup> .....	-14,602	-14,602	-25,000	-10,398	0	+25,000
Less High Performance Computing and Communications (HPC) <sup>1</sup> .....	-111,173	-101,939	0	+111,173	0	0
Less Scientific Simulation Initiative (SSI) <sup>1</sup> .....	0	-50,860	0	0	0	0
Total, MICS Core .....						
13,059	17,174	17,174	+4,115	18,033	+859	
Laboratory Technology Research .....	16,142	14,300	14,300	-1,842	14,300	0
Advanced Energy Projects .....	2,495	0	0	-2,495	0	0
Subtotal, CTR Core .....						
31,696	31,474	31,474	0	32,333	0	
Use of Prior Year Balances .....	-1,573	0	0	+1,573	0	0
Total, CTR Core .....						
30,123	31,474	31,474	+1,351	32,333	+859	
Energy Research Analysis:						
Subtotal, Energy Research Analysis .....	1,000	1,000	1,000	0	1,000	0
Use of Prior Year Balances .....	-92	0	0	+92	0	0
Total, Energy Research Analysis .....						
908	1,000	1,000	+92	1,000	0	
Multiprogram Energy Labs—Facility Support:						
Subtotal, Multiprogram Energy Labs—Facility Support .....	21,260	21,260	22,309	+1,049	23,425	+1,115

TABLE 2. H.R. 1655—THE DEPARTMENT OF ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT OF 1999—Continued

[Dollars in thousands]

Program/Activity	FY 1999 appropriation	FY 2000 request	FY 2000 recommendation	FY 2000 rec- ommendation compared with (+ or –) FY 1999 appropria- tion	FY 2001 recommendation	FY 2001 rec- ommendation compared with (+ or –) FY 2000 rec- ommendation
Use of Prior Year Balances .....	– 13	0	0	+13	0	0
Total, Multiprogram Energy Labs—Facility Support .....	21,247	21,260	22,309	+1,062	23,425	1,115
Fusion Energy Sciences:						
Tokamak Fusion Test Reactor (TFTR) Decontamination and Decommissioning .....	3,600	13,600	13,600	+10,000	19,400	+5,800
International Thermonuclear Experimental Reactor (ITER) Engineering Design Activities (EDA) .....	12,200	0	0	– 12,200	0	0
Other Fusion Energy Sciences .....	206,836	209,014	236,400	+29,564	255,600	+19,200
Subtotal, Fusion Energy Sciences .....	222,636	222,614	250,000	+27,364	275,000	+25,000
Use of Prior Year Balances .....	– 1,136	0	0	+1,136	0	0
Total, Fusion Energy Sciences .....	221,500	222,614	250,000	+28,500	275,000	+25,000
Science Program Direction .....	49,800	51,360	49,800	0	49,800	0
Total, Science Core Budget Authority/Authorization .....	2,449,685	2,436,402	2,539,861	+90,176	2,678,365	+138,504
Other Science:						
Spallation Neutron Source (SNS):						
SNS Research and Development (R&D) .....	28,600	17,900	17,900	– 10,700	13,100	– 4,800
Construction: Project 99–E–344, SNS, Oak Ridge National Laboratory .....	101,400	196,100	100,000	– 1,400	0	– 100,000
Total, SNS .....	130,000	214,000	117,900	– 12,100	13,100	– 104,800
High Performance Computing and Communications (HPCC) .....	111,173	101,939	0	– 111,173	0	0
Next Generation Internet (NGI) (P.L. 105–277 and P.L. 105–305) .....	14,602	14,602	25,000	+10,398	0	– 25,000
Scientific Simulation Initiative (SSI):						
BER SSI .....	0	9,762	0	0	0	0
BES SSI .....	0	6,828	0	0	0	0
CTR SSI .....	0	50,860	0	0	0	0
Science Program Direction SSI .....	0	1,000	0	0	0	0
Total, SSI .....	0	68,450	0	0	0	0
Total, Other Science Budget Authority/Authorization <sup>1</sup> .....	225,775	398,991	142,900	– 112,875	13,100	– 129,800



Subtotal, Science Budget Authority .....	2,705,460	2,835,393	2,682,761	-22,699	2,691,465	+8,704
Use of Prior Year Balances/Other Adjustments .....	-7,600	0	0	+7,600	0	0
Total, Science Budget Authority .....	2,697,860	2,835,393	2,682,761	-15,099	2,691,465	+8,704
Less Next Generation Internet (NGI) (P.L. 105-277 and P.L. 105-305) <sup>1</sup> .....	-14,602	-14,602	-25,000	-10,398	0	+25,000
Total, Science Budget Authorization .....	2,683,258	2,820,791	2,657,761	-25,497	2,691,465	+33,704
FOSSIL ENERGY R&D SUMMARY						
Coal .....	123,143	122,432	126,609	+3,466	126,614	+5
Petroleum .....	48,616	50,166	50,574	+1,958	52,091	+1,517
Gas .....	115,207	105,314	107,916	-7,291	108,831	+915
Program Direction and Management Support .....	69,481	72,079	71,114	+1,633	72,796	1,682
Plant and Capital Equipment .....	2,600	2,000	2,000	-600	2,060	+60
Cooperative Research and Development .....	6,836	5,836	7,178	+342	7,537	+359
Fuel Conversion, Natural Gas and Electricity .....	2,173	2,173	2,173	0	2,173	0
Advanced Metallurgical Processes .....	5,000	5,000	5,000	0	5,000	0
Fossil Energy Science Initiative .....	0	0	25,000	+25,000	50,000	+25,000
Subtotal, Fossil Energy R&D Budget: Authority/Authorization .....	373,056	365,000	397,564	-24,508	427,102	+29,538
Use of Prior Year Balances .....	0	-11,000	0	0	0	0
Total, Fossil Energy R&D Budget Authority/Authorization .....	373,056	354,000	397,564	+24,508	427,102	+29,538
FOSSIL ENERGY R&D						
Coal:						
Advanced Clean Fuels Research:						
Coal Preparation .....	5,097	4,000	5,250	+153	5,407	+157
Direct Liquefaction .....	3,150	1,641	1,641	-1,509	0	-1,641
Indirect Liquefaction .....	5,500	6,659	6,659	+1,159	6,859	+200
Advanced Research and Environmental Technology .....	1,781	2,200	2,200	+419	2,310	+110
Total, Advanced Clean Fuels Research .....	15,528	14,500	15,750	+222	14,576	-1,174
Advanced Clean/Efficient Power Systems:						
Advanced Pulverized Coal-Fired Powerplant .....	15,000	3,000	3,000	-12,000	0	-3,000
Indirect Fired Cycle .....	6,500	7,010	7,010	+510	7,220	+210
High-Efficiency Integrated Gasified Combined Cycle .....	32,388	38,661	38,661	+6,273	39,821	+1,160
High-Efficiency Pressurized Fluidized Bed .....	14,638	12,202	15,077	+439	15,529	+452
Advanced Research and Environmental Technology .....	19,150	23,864	23,864	+4,714	25,057	+1,193

TABLE 2. H.R. 1655—THE DEPARTMENT OF ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT OF 1999—Continued

[Dollars in thousands]

Program/Activity	FY 1999 appropriation	FY 2000 request	FY 2000 recommendation	FY 2000 rec- ommendation compared with (+ or -) FY 1999 appropria- tion	FY 2001 recommendation	FY 2001 rec- ommendation compared with (+ or -) FY 2000 rec- ommendation
Total, Advanced Clean/Efficient Power Systems .....	87,676	84,737	87,612	-64	87,628	+16
Advanced Research and Technology Development .....	19,939	23,195	23,247	+3,308	24,410	+1,162
Total, Coal .....	123,143	122,432	126,609	+3,466	126,614	+5
Petroleum:						
Oil technology:						
Exploration and Production Supporting Research .....	30,796	31,546	31,720	+924	32,671	+952
Recovery Field Demonstrations .....	7,800	7,800	8,034	234	8,275	+241
Effective Environmental Protection .....	10,020	10,820	10,820	+800	11,145	+325
Total, Petroleum .....	48,616	50,166	50,574	+1,958	52,091	+1,517
Gas:						
Natural Gas Research:						
Exploration and Production .....	13,432	14,932	14,932	+1,500	15,380	+448
Gas Hydrates .....	0	0	5,000	+5,000	7,500	+2,500
Delivery and Storage .....	1,000	1,000	1,030	+30	1,061	+31
Advanced Turbine Systems .....	44,500	41,808	41,808	-2,692	41,808	0
Emerging Processing Technology Applications .....	9,058	7,308	9,330	+272	9,610	+280
Effective Environmental Protection .....	3,017	2,617	3,108	+91	3,201	+93
Total, Natural Gas Research .....	71,007	67,665	75,207	+4,200	78,559	+3,352
Fuel Cells:						
Advanced Research .....	1,200	1,200	1,260	+60	1,323	+63
Fuel Cells Systems .....	41,000	36,449	36,449	-4,551	36,449	0
Multilayer Ceramic Technology .....	2,000	0	0	-2,000	0	0
Total, Fuel Cells .....	44,200	37,649	37,709	-6,491	37,772	+63
Less Offset for Gas Hydrates program .....	0	0	-5,000	-5,000	-7,500	-2,500
Total, Gas .....	115,207	105,314	107,916	-7,291	108,831	+915
Program Direction and Management Support:						
Headquarters Program Direction .....	15,049	16,016	15,049	0	15,049	0

Energy Technology Center Program Direction .....	54,432	56,063	56,065	+1,633	57,747	+1,682
Total, Program Direction and Management Support .....	69,481	72,079	71,114	+1,633	72,796	+1,682
Plant and Capital Equipment: GP-F-100, General Plant Projects .....	2,600	2,000	2,000	-600	2,060	+60
Cooperative Research and Development .....	6,836	5,836	7,178	+342	7,537	+359
Fuels Conversion, Natural Gas and Electricity .....	2,173	2,173	2,173	0	2,173	0
Advanced Metallurgical Processes .....	5,000	5,000	5,000	0	5,000	0
Fossil Energy Science Initiative .....	0	0	25,000	+25,000	50,000	+25,000
Subtotal, Fossil Energy R&D Budget:						
Authority/Authorization .....	373,056	365,000	397,564	+24,508	427,102	+29,537
Use of Prior Year Balances .....	0	-11,000	0	0	0	0
Total, Fossil Energy R&D Budget Authority/Authorization .....	373,056	354,000	397,564	+24,508	427,102	+29,537
ENERGY CONSERVATION R&D SUMMARY						
Transportation Sector .....	194,166	241,400	204,935	+10,769	210,845	+5,910
Industry Sector .....	165,859	171,000	155,131	-10,728	159,534	-4,403
Building Technology, State and Community Sector—Non-Grants .....	67,975	103,418	70,014	+2,039	72,115	+2,101
Policy and Management .....	37,732	46,666	35,132	-2,600	35,132	0
Energy Efficiency Science Initiative .....	0	0	25,000	+25,000	50,000	+25,000
Total, Energy Conservation R&D Budget Authority/Authorization .....	465,732	562,484	490,212	+24,480	527,626	+37,414
ENERGY CONSERVATION R&D						
Transportation Sector:						
Vehicle Technology R&D .....	125,936	168,080	129,714	+3,778	133,606	+3,891
Fuels Utilization R&D .....	0	0	2,500	+2,500	2,750	+250
Biodiesel fuels R&D .....	17,785	23,500	21,000	+3,215	21,455	+455
Other Fuels Utilization R&D .....	17,785	23,500	23,500	+5,715	24,205	+705
Total, Fuels Utilization R&D .....	5,045	7,000	5,196	+151	5,352	+156
Technology Deployment .....	37,475	33,000	38,599	+1,124	39,757	+1,158
Materials Technologies .....	7,925	9,820	7,925	0	7,925	0
Management and Planning .....						
Total, Transportation Sector .....	194,166	241,400	204,935	+10,769	210,845	+5,910
Industry Sector:						
Industries of the Future (Specific) .....	57,456	74,000	59,180	+1,724	60,955	+1,775
Industries of the Future (Crosscutting) .....	100,052	87,600	87,600	-12,452	90,228	+2,628

TABLE 2. H.R. 1655—THE DEPARTMENT OF ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT OF 1999—Continued

[Dollars in thousands]

Program/Activity	FY 1999 appropriation	FY 2000 request	FY 2000 recommendation	FY 2000 rec- ommendation compared with (+ or –) FY 1999 appropria- tion	FY 2001 recommendation	FY 2001 rec- ommendation compared with (+ or –) FY 2000 rec- ommendation
Management and Planning .....	8,351	9,400	8,351	0	8,351	0
Total, Industry Sector .....	165,859	171,000	155,131	– 10,728	159,534	+4,403
Building Technology, State and Community Sector—Non-Grants:						
Building Research .....	54,243	73,320	55,870	+1,627	57,546	+1,676
Building Technology Assistance (Non-Grants) .....	13,732	30,098	14,144	+412	14,568	424
Total Building Technology, State and Community Sector—Non-Grants .....	67,975	103,418	70,014	+2,039	72,115	+2,101
Policy and Management .....	37,732	46,666	35,132	– 2,600	35,132	0
Energy Conservation Science Initiative .....	0	0	25,000	+25,000	50,000	+25,000
Total, Energy Conservation R&D Budget Authority/Authorization .....	465,732	562,484	490,212	+24,480	527,626	+37,414
Subtotal 1, H.R. 1655 Budget Authorization .....	3,806,783	4,050,112	3,977,903	+171,120	4,098,770	+120,867
Less 1 Percent of Subtotal 1 Authorized for FY 2000 .....	0	0	– 39,779	– 39,779	0	+39,779
Subtotal 2, H.R. 1655 Budget Authorization .....	3,806,783	4,050,112	3,938,124	+131,124	4,098,770	+160,646
Less 0.7674 Percent of Subtotal 2 Authorized for FY 2000 Representing a Reduction in Travel Costs .....	0	0	– 30,221	– 30,221	0	+30,221
Less \$30,000,000 for Administrative Expenses for FY 2000 .....	0	0	– 30,000	– 30,000	0	+30,000
Total, H.R. 1655 Budget Authorization .....	3,806,783	4,050,112	3,877,903	+71,120	4,098,770	+220,867
Existing Authorizations:						
Hydrogen Research (P.L. 104–271 and P.L. 105–245) .....	22,250	28,000	35,000	+12,750	40,000	+5,000
Next Generation Internet (NGI) (P.L. 105–277 and P.L. 105–305) <sup>1</sup> .....	14,602	14,602	25,000	+10,398	<sup>1</sup> 0	25,000
Total, H.R. 1655 Budget Authority .....	3,843,635	4,092,714	3,937,903	+94,268	4,138,770	+200,867

<sup>1</sup> Excluded from this authorization legislation is DOE's High Performance Computing and Communications (HPCC) and NGI programs and its activities under the proposed Information Technology for the 21st Century (IT2) Initiative—the Scientific Simulation Initiative (SSI). The lack of authorization for these programs in H.R. 1655 should not be construed as a lack of endorsement of these programs. It is the Chairman's intention or the Committee to act on separate legislation that will authorize appropriations for the HPCC Program—including DOE's portion—as well as the proposed IT2 Initiative and further NGI activities for those agencies under the Committee's jurisdiction.

## VII. SECTION-BY-SECTION ANALYSIS AND COMMITTEE VIEWS

### *Section 1. Short title*

Section 1 cites the Act as the “Department of Energy Research, Development, and Demonstration Authorization Act of 1999.”

### *Section 2. Definitions*

Section 2 defines: (1) the “Department” as the Department of Energy; and (2) the “Secretary” as the Secretary of Energy.

### *Section 3. Authorization of appropriations*

Subsection 3(a) authorizes \$432,366,000 for fiscal year (FY) 2000 and \$452,577,000 for FY 2001 for Energy Supply civilian energy and scientific RD&D and related commercial application of energy technology operation and maintenance and construction programs, projects and activities for which specific sums are not authorized under other authority of law, to remain available through the end of FY 2002, of which:

(1) \$316,624,000 for FY 2000 and \$325,321,000 for FY 2001 shall be for Solar and Renewable Resources Technologies, including—(A) \$3,708,000 for FY 2000 and \$3,819,000 for FY 2001 for Solar Building Technology Research; (B) \$83,345,000 for FY 2000 and \$85,845,000 for FY 2001 for Photovoltaic Energy Systems; (C) \$17,510,000 for FY 2000 and \$18,035,000 for FY 2001 for Concentrating Solar Power, of which \$2,000,000 for FY 2000 and \$3,000,000 for FY 2001 shall be for experimental beamed power technology demonstrations; (D) \$75,396,000 for FY 2000 and \$77,658,000 for FY 2001 for Biopower/Biofuels Energy Systems; (E) \$35,814,000 for FY 2000 and \$36,889,000 for FY 2001 for Wind Energy Systems; (F) \$1,500,000 for FY 2000 and \$1,500,000 for FY 2001 for the Renewable Energy Production Incentive Program; (G) \$6,000,000 for FY 2000 and \$6,000,000 for FY 2001 for the International Solar Energy Program; (H) \$1,100,000 for FY 2000 and \$1,100,000 for FY 2001 for the National Renewable Energy Laboratory; (I) \$33,500,000 for FY 2000 and \$35,000,000 for FY 2001 for Geothermal, of which \$4,000,000 for fiscal year 2000 and \$4,615,000 for fiscal year 2001 shall be derived from amounts otherwise authorized under this subsection, from savings resulting from reductions in contractor travel pursuant to subsection 10(d); (J) \$3,348,000 for FY 2000 and \$3,448,000 for FY 2001 for Hydropower; (K) \$41,303,000 for FY 2000 and \$42,542,000 for FY 2001 for Electric Energy Systems and Storage; and (L) \$18,100,000 for FY 2000 and \$18,000,000 for FY 2001 for Program Direction; and

(2) \$115,742,000 for FY 2000 and \$127,256,000 for FY 2001 shall be for Nuclear Energy, including—(A) \$37,000,000 for FY 2000 and \$37,000,000 for FY 2001 for Advanced Radioisotope Power Systems; (B) \$6,070,000 for FY 2000 and \$6,070,000 for FY 2001 for the Test Reactor Area (TRA) Landlord operation and maintenance; (C) \$1,430,000 for FY 2000 and \$1,944,000 for FY 2001 for construction of Project 99–E–200, TRA Electric Utility Upgrade, Idaho National Engineering and Environmental Laboratory (INEEL); (D) \$1,500,000 for FY 2000 and \$2,500,000 for FY 2001 for construction of Project 95–E–201, TRA Fire and Life Safety Improvements, INEEL; (E) \$13,500,000 for FY 2000 and \$16,000,000 for FY 2001

for University Reactor Fuel Assistance and Support; (F) \$5,000,000 for FY 2000 and \$7,500,000 for FY 2001 for Nuclear Energy Plant Optimization (G) \$30,000,000 for FY 2000 and \$35,000,000 for FY 2001 for the Nuclear Energy Research Initiative; and (H) \$21,242,000 for FY 2000 and \$21,242,000 for FY 2001 for Program Direction.

Subsection 3(b) authorizes \$2,657,761,000 for FY 2000 and \$2,691,465,000 for FY 2001 for Science scientific and energy RD&D operation and maintenance and construction programs, projects and activities for which specific sums are not authorized under other authority of law, to remain available until expended, of which:

(1) \$715,090,000 for FY 2000 and \$753,110,000 for FY 2001 shall be for High Energy Physics, including—(A) \$235,190,000 for FY 2000 and \$246,950,000 for FY 2001 for High Energy Physics Research and Technology; (B) \$451,200,000 for FY 2000 and \$473,760,000 for FY 2001 for High Energy Physics Facility Operations; (C) \$2,000,000 for FY 2000 and \$5,200,000 for FY 2001 for construction of Project 00–G–307, Research Office Building, Stanford Linear Accelerator Center; (D) \$4,700,000 for FY 2000 and \$4,200,000 for FY 2001 for construction of Project 99–G–306, Wilson Hall Safety Improvements Project, Fermi National Accelerator Laboratory (Fermilab); and (E) \$22,000,000 for FY 2000 and \$23,000,000 for FY 2001 for construction of Project 98–G–304, Neutrinos at the Main Injector, Fermilab;

(2) \$357,714,000 for FY 2000 and \$375,600,000 for FY 2001 shall be for Nuclear Physics;

(3) \$413,674,000 for FY 2000 and \$434,357,000 for FY 2001 shall be for Biological and Environmental Research;

(4) \$698,800,000 for FY 2000 and \$733,740,000 for FY 2001 shall be for Basic Energy Sciences, including—(A) \$405,390,000 for FY 2000 and \$425,660,000 for FY 2001 for Materials Sciences Research and Facilities Operations; (B) \$217,179,000 for FY 2000 and \$228,038,000 for FY 2001 for Chemical Sciences Research and Facilities Operations; (C) \$18,820,000 for FY 2000 and \$19,761,000 for FY 2001 for Engineering Research; (D) \$26,056,000 for FY 2000 and \$27,359,000 for FY 2001 for Geosciences Research; and (E) \$31,355,000 for FY 2000 and \$32,923,000 for FY 2001 for Energy Biosciences;

(5) \$31,474,000 for FY 2000 and \$32,333,000 for FY 2001 shall be for Computational and Technology Research, including—(A) \$17,174,000 for FY 2000 and \$18,033,000 for FY 2001 for Mathematical, Information, and Computational Sciences; and (B) \$14,300,000 for FY 2000 and \$14,300,000 for FY 2001 for Laboratory Technology Research;

(6) \$1,000,000 for FY 2000 and \$1,000,000 for FY 2001 shall be for Energy Research Analysis;

(7) \$22,309,000 for FY 2000 and \$23,425,000 for FY 2001 shall be for Multiprogram for Energy Laboratories—Facility Support;

(8) \$250,000,000 for FY 2000 and \$275,000,000 for FY 2001 shall be for Fusion Energy Sciences, including \$13,600,000 for FY 2000 and \$19,400,000 for FY 2001 for Tokamak Fusion Test Reactor Decontamination and Decommissioning;

(9) \$49,800,000 for FY 2000 and \$49,800,000 for FY 2001 for Science Program Direction;

(10) \$17,900,000 for FY 2000 and \$13,100,000 for FY 2001 shall be for SNS R&D; and

(11) \$100,000,000 for FY 2000 shall be for construction of Project 99-E-334, the SNS at Oak Ridge National Laboratory.

Subsection 3(c) authorizes \$397,564,000 for FY 2000 and \$427,102,000 for FY 2001 for Fossil Energy Research and Development energy and scientific RD&D and related commercial application of energy technology operation and maintenance programs, projects and activities for which specific sums are not authorized under other authority of law, to remain available through the end of FY 2002, of which:

(1) \$126,609,000 for FY 2000 and \$126,614,000 for FY 2001 shall be for Coal, including—(A) \$5,250,000 for FY 2000 and \$5,407,000 for FY 2001 for Coal Preparation; (B) \$1,641,000 for FY 2000 for Direct Liquefaction; (C) \$6,659,000 for FY 2000 and \$6,859,000 for FY 2001 for Indirect Liquefaction; (D) \$2,200,000 for FY 2000 and \$2,310,000 for FY 2001 for Advanced Clean Fuels Research Advanced Research and Environmental Technology; (E) \$3,000,000 for FY 2000 for Advanced Pulverized Coal-Fired Powerplant; (F) \$7,010,000 for FY 2000 and \$7,220,000 for FY 2001 for Indirect Fired Cycle; (G) \$38,661,000 for FY 2000 and \$39,821,000 for FY 2001 for High-Efficiency-Integrated Gasification Combined Cycle; (H) \$15,077,000 for FY 2000 and \$15,529,000 for FY 2001 for High-Efficiency Pressurized Fluidized Bed; (I) \$23,864,000 for FY 2000 and \$25,057,000 for FY 2001 for Advanced Clean/Efficient Power Systems Advanced Research and Environmental Technology; and (J) \$23,247,000 for FY 2000 and \$24,410,000 for FY 2001 for Advanced Research and Technology Development;

(2) \$50,574,000 for FY 2000 and \$52,091,000 for FY 2001 shall be for Oil Technology, including—(A) \$31,720,000 for FY 2000 and \$32,671,000 for FY 2001 for Exploration and Production Supporting Research; (B) \$8,034,000 for FY 2000 and \$8,275,000 for FY 2001 for Recovery Field Demonstrations; and (C) \$10,820,000 for FY 2000 and \$11,145,000 for FY 2001 for Oil Technology Effective Environmental Protection;

(3) \$107,916,000 for FY 2000 and \$108,831,000 for FY 2001 shall be for Gas, including—(A) \$14,932,000 for FY 2000 and \$15,380,000 for FY 2001 for Natural Gas Research Exploration and Production; (B) \$1,030,000 for FY 2000 and \$1,061,000 for FY 2001 for Natural Gas Research Delivery and Storage; (C) \$41,808,000 for FY 2000 and \$41,808,000 for FY 2001 for Natural Gas Research Advanced Turbine Systems; (D) \$9,330,000 for FY 2000 and \$9,610,000 for FY 2001 for Natural Gas Research Emerging Processing Technology Applications; (E) \$3,108,000 for FY 2000 and \$3,201,000 for FY 2001 for Natural Gas Effective Environmental Protection; (F) \$1,260,000 for FY 2000 and \$1,323,000 for FY 2001 for Fuel Cells Advanced Research; and (G) \$36,449,000 for FY 2000 and \$36,449,000 for FY 2001 for Fuel Cells Systems;

(4) \$71,114,000 for FY 2000 and \$72,796,000 for FY 2001 shall be for Program Direction and Management Support, including—(A) \$15,049,000 for FY 2000 and \$15,049,000 for FY 2001 for Headquarters Program Direction; and (B) \$56,065,000 for FY 2000 and

\$57,747,000 for FY 2001 for Energy Technology Center Program Direction;

(5) \$2,000,000 for FY 2000 and \$2,060,000 for FY 2001 shall be for GP-F-100, Plant and Capital Equipment, at Energy Technology Center sites;

(6) \$7,148,000 for FY 2000 and \$7,537,000 for FY 2001 shall be for Cooperative Research and Development;

(7) \$2,173,000 for FY 2000 and \$2,173,000 for FY 2001 shall be for Fuels Conversion, Natural Gas, and Electricity;

(8) \$5,000,000 for FY 2000 and \$5,000,000 for FY 2001 shall be for Advanced Metallurgical Processes; and

(9) \$25,000,000 for FY 2000 and \$50,000,000 for FY 2001 shall be for a Fossil Energy Science Initiative to be managed by the Assistant Secretary for Fossil Energy in consultation with the Director of the Office of Science, for grants to be competitively awarded and subject to peer review for research relating to fossil energy. The Secretary is required to submit to the Committee on Science and the Committee on Appropriations of the House and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate an annual report on the activities of the Initiative, including a description of the process used to award the funds and an explanation of how the research relates to fossil energy.

Finally, subsection 3(d) authorizes \$490,212,000 for FY 2000 and \$527,626,000 for FY 2001 for Energy Conservation Research and Development energy and scientific RD&D and related commercial application of energy technology operation and maintenance programs, projects and activities for which specific sums are not authorized under other authority of law, to remain available through the end of FY 2002, of which:

(1) \$204,935,000 for FY 2000 and \$210,845,000 for FY 2001 shall be for the Transportation Sector, including—(A) \$129,714,000 for FY 2000 and \$133,606,000 for FY 2001 for Vehicle Technology Research and Development; (B) \$23,500,000 for FY 2000 and \$24,205,000 for FY 2001 for Fuels Utilization Research and Development, of which \$2,500,000 for FY 2000 and \$2,750,000 for FY 2001 shall be for biodiesel fuel R&D; (C) \$5,196,000 for FY 2000 and \$5,352,000 for FY 2001 for Technology Deployment; (D) \$38,599,000 for FY 2000 and \$39,757,000 for FY 2001 for Materials Technology; and (E) \$7,925,000 for FY 2000 and \$7,925,000 for FY 2001 for Management and Planning;

(2) \$155,131,000 for FY 2000 and \$159,534,000 for FY 2001 shall be for the Industry Sector, including—(A) \$59,180,000 for FY 2000 and \$60,955,000 for FY 2001 for Industries of the Future (Specific); (B) \$87,600,000 for FY 2000 and \$90,228,000 for FY 2001 for Industries of the Future (Crosscutting); and (C) \$8,351,000 for FY 2000 and \$8,351,000 for FY 2001 for Management and Planning;

(3) \$70,014,000 for FY 2000 and \$72,115,000 for FY 2001 shall be for the Building Technology, State and Community Sector (non-grants), including—(A) \$55,870,000 for FY 2000 and \$57,546,000 for FY 2001 for Building Research; and (B) \$14,144,000 for FY 2000 and \$14,568,000 for FY 2001 for Building Technology Assistance (nongrants);



(4) \$35,132,000 for FY 2000 and \$35,132,000 for FY 2001 shall be for Policy and Management; and

(5) \$25,000,000 for FY 2000 and \$50,000,000 for FY 2001 shall be for an Energy Efficiency Science Initiative to be managed by the Assistant Secretary for Energy Efficiency and Renewable Energy in consultation with the Director of the Office of Science, for grants to be competitively awarded and subject to peer review for research relating to energy efficiency. The Secretary is required to submit to the Committee on Science and the Committee on Appropriations of the House and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate an annual report on the activities of the Initiative, including a description of the process used to award the funds and an explanation of how the research relates to energy efficiency.

#### *Committee views*

As noted in the footnote to the budget Tables 1 and 2 above DOE's HPCC and NGI programs and its activities under the proposed Information Technology for the 21st Century(IT2) Initiative—the Scientific Simulation Initiative (SSI), are excluded from this authorization legislation. The lack of authorization for these programs in H.R. 1655 should not be construed as a lack of endorsement of these programs. It is the Chairman's Intention for the Committee to act on separate legislation that will authorize appropriations for the HPCC Program—including DOE's portion—as well as the proposed IT2 Initiative and further NGI activities for those agencies under the Committee's jurisdiction.

*High Energy Physics.*—The authorization levels provided for High Energy Physics should be sufficient to implement the February, 1998 High Energy Physics Panel (HEPAP) recommendations for a "current level of effort" budget and that can sustain high-priority experimentation on current facilities and develop long-range opportunities for the field in the post-2010 era. The Committee notes HEPAP's recognition that this budget profile requires termination of some current research in deference to higher priorities.

*Nuclear Physics.*—The authorization levels provided for Nuclear Physics support continuing operation of the MTT Bates Linear Accelerator Center, as well for increased operations of the Thomas Jefferson National Accelerator Laboratory and the Relativistic Heavy Ion Collider and increased funding for university groups to more effectively participate in research at the new facilities.

*Biological and Environmental Research (BER) and Basic Energy Sciences (BES).*—The authorization levels provided for the BER and BES programs provide a substantial increase above the Administration's request—particularly for the operation the current portfolio of world-class scientific facilities. The Committee expects that these additional funds will be used to utilize these facilities more fully, as well as to support other long-range, high-risk basic research.

*Fusion Energy Sciences (FES).*—The Committee recognizes that the broad fusion community—both magnetic and inertial—have made substantial progress in redirecting the FES program over the past several years. The Committee also notes that there are a number of ongoing reviews of the program that may result in further

restructuring and expects that the additional funds provide in this bill will be allocated in a manner consistent with the results of these reviews. The Committee also has included bill language that prohibits funds authorized by this Act to be used either directly or indirectly for further U.S. participation in the ITER EDA.

*Industries of the Future Program.*—While the bill does not authorize the full amount of funding requested by the Administration for DOE’s Industries of the Future Program, the Committee does not intend this to affect negatively DOE’s continuation of the black liquor and wood residue gasification initiative.

#### *Section 4. Gas hydrate energy and scientific and environmental research and development program*

Subsection 4(a) directs the Secretary, not later than 180 days after the date of enactment of this Act, acting through the Assistant Secretary for Fossil Energy (ASFE), to commence a program of gas hydrate energy and scientific and environmental R&D.

Subsection 4(b) allows the Secretary, acting through the ASFE, to award grants or contracts to, or enter into cooperative agreements with, institutions of higher education and industrial enterprises to conduct energy and scientific and environmental RD&D programs on gas hydrate. Such funds made available for initiating contracts, grants, cooperative agreements, interagency funds transfer agreements, and field work proposals shall be made available based on a competitive selection process and peer review of proposals. Exceptions shall be considered on a case-by-case basis, and reported by the Secretary, acting through the ASFE, to the Committee on Science of the House and the Committee on Energy and Natural Resources of the Senate 30 days prior to any such award.

Subsection 4(c) allows the Secretary, acting through the ASFE, to establish an advisory panel consisting of experts from industry, institutions of higher education, and other entities as the Secretary considers appropriate, to assist in developing recommendations and priorities for the gas hydrate R&D program carried out under subsection 4(a).

Subsection 4(d) provides that: (1) not more than 5 percent of the amount made available to carry out this section for a fiscal year may be used by the Secretary, acting through the ASFE, for expenses associated with the administration of the program carried out under subsection 4(a); and (2) none of the funds made available to carry out this section may be used for the construction of a new building or the acquisition, expansion, remodeling, or alteration of an existing building (including site grading and improvement and architect fees).

Subsection 4(d) defines the terms “contract”, “cooperative agreement”, “grant”, and “institution of higher education”.

And, subsection 4(e) provides that of the \$107,916,000 for FY 2000 and \$108,831,000 for FY 2001 authorized under section 3(c)(3) for Gas, \$5,000,000 for FY 2000 and \$7,500,000 for FY 2001 shall be available for carrying out this section.

#### *Section 5. Notice*

Subsections 5(a) and (b) allow the Secretary to reprogram funds for any authorized civilian energy or scientific research, develop-

ment, or demonstration or related commercial application of energy technology programs, projects, or activities of the Department—(1) up to the lesser of \$250,000 or 5 percent of the total funding for a fiscal year of another such program, project or activity of the Department; or (2) up to 25 percent of the total funding for a fiscal year for such program, project, or activity of the Department after the Secretary has transmitted a report containing a full and complete statement of the action proposed to be taken and the facts and circumstances that support such proposed action to the Committee on Science and the Committee on Appropriations of the House, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate and a period of 60 days has elapsed after the date on which the report is received (excluding any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain).

Subsection 5(c) prohibits the use of reprogrammed funds for a program, project, or activity for which funding has been requested to the Congress but which has not been funded by the Congress.

Subsection 5(d) requires the Secretary to provide notice to the Committee on Science and the Committee on Appropriations of the House, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, not later than 15 days before any major reorganization of any civilian energy or scientific research, development, or demonstration or related application of energy technology program, project, or activity of the Department.

Subsection 5(e) requires the Secretary to provide copies to the Committee on Science and the Committee on Appropriations of the House, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, of any report relating to the civilian energy or scientific research, development, or demonstration or related commercial application of energy technology of projects, programs and activities of the Department prepared at the direction of any committee of Congress.

#### *Section 6. Limitation on demonstrations*

Subsection 6 requires DOE to provide funding only for civilian energy or scientific or commercial application of energy technology demonstration programs, projects and activities for technologies or processes that can reasonably be expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

#### *Section 7. Limits on general plant projects*

Section 7 requires the Secretary to halt the construction of a civilian energy or scientific research development, or demonstration or related commercial application of energy technology “general plant project” if the estimated cost of the project (including any revisions) exceeds \$2,000,000 unless the Secretary has furnished a complete report to the Committee on Science and the Committee on Appropriations of the House, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the

Senate, explaining the project and the reasons for the estimate or revision.

*Section 8. Limits on construction projects*

Section 8 prohibits construction on a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology construction project for which funding has been specifically authorized by law to be initiated and continued if the estimated cost for the project exceeds 110 percent of the higher of: (1) the amount authorized for the project, or (2) the most recent total estimated cost presented to the Congress as justification for such project. To exceed such limits, the Secretary of Energy must report in detail to the Committee on Science and the Committee on Appropriations of the House, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate and the report must be before the committees for 30 legislative days (excluding any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain). This section shall not apply to any construction project which has a current estimated cost of less than \$2,000,000.

*Section 9. Authority for conceptual and construction design*

Section 9 limits the Secretary's authority to requests construction funding in excess of \$2,000,000 for a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology construction project until the Secretary has completed a conceptual design for that project. Furthermore, if the estimated cost of completing a conceptual design for the construction project exceeds \$750,000, the Secretary must submit a request to Congress for funds for the conceptual design before submitting a request for the construction project.

In addition, the section allows the Secretary to carry out construction design (including architectural and engineering services) in connection with any proposed construction project that is in support of a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology program, project, or activity of the Department if the total estimated cost for such design does not exceed \$250,000; if the total estimated cost for construction design exceeds \$250,000, funds for such design must be specifically authorized by law.

*Section 10. Limits of use of funds*

Subsection 10(a) prohibits the obligation of any funds authorized by subsection 3(b)(11) for the construction of the Project 99-E-334, the SNS at Oak Ridge National Laboratory until: (1) the Secretary certifies in writing to the Committee on Science of the House and the Committee on Energy and Natural Resources of the Senate that senior project management positions for the project have been filled by qualified individuals; (2) the Secretary provides the Committee on Science and the Committee on Appropriations of the House, and the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, with—(A) a cost baseline and project milestones for each major construction and

technical system activity, consistent with the overall cost and schedule submitted with the Department's fiscal year 2000 budget, that have been reviewed and certified by an independent entity, outside the Department and having no financial interest in the project, as the most cost-effective way to complete the project; (B) binding legal agreements that specify the duties and obligations of each laboratory of the Department in carrying out the project; (C) a revised project management structure that integrates the staff of the collaborating laboratories working on the project under a single project director, who shall have direct supervisory responsibility over the carrying out of the duties and obligations described in subparagraph (B); and (D) official delegation by the Secretary of primary authority with respect to the project to the project director; and (3) the Comptroller General certifies to the Congress and the total taxes and fees in any manner or form paid by the Federal Government on the SNS and the property, activities, and income of the department relating to the SNS to the State of Tennessee or its counties, municipalities, or any other subdivision thereof, does not exceed the aggregate taxes and fees for which the Federal Government would be liable if the project were located in any other State that contains a national laboratory of the Department. Finally, subsection 10(a) requires the Secretary shall report on the SNS project, as part of the Department's annual budget submission, including a description of the achievement of milestones, a comparison of actual costs to estimated costs, and any changes in estimated project costs or schedule.

Also, section 10 prohibits funds authorized by this Act to be used either directly or indirectly for: (b) U.S. participation in the ITER EDA; or (c) to fund the salary of an individual holding the position of Director or Deputy Director of the Office of Science, or Associate Director (except for the Office of Laboratory Policy or Office Resource Management), or Director, Office of Planning and Analysis within the Department's Office of Science unless such individual holds a postgraduate degree in science or engineering.

In addition, subsection 10(d) provides that not more than 1 percent of the funds authorized by this Act may be used either directly or indirectly to fund travel costs of the Department or travel costs for persons awarded contracts or subcontracts by the Department. As part of the Department's annual budget request submission to the Congress, the Secretary must submit a report to the Committee on Science and Committee on Appropriations of the House, and to the Committee on Energy and Natural Resources and Committee on Appropriations of the Senate that identifies—(1) the estimated amount of travel costs by the Department and for persons awarded contracts or subcontracts by the Department for the fiscal year of such budget submission, as well as for the two previous years; (2) the major purposes for such travel; and (3) the sources of funds for such travel.

Subsection 10(e) provides that no funds authorized by the Act may be used either directly or indirectly to fund a grant, contract, subcontract or any other form of financial assistance awarded by the Department to a trade association on a noncompetitive basis. As part of the Department's annual budget request submission to the Congress, the Secretary shall also submit a report to the Com-

mittee on Science and Committee on Appropriations of the House, and to the Committee on Energy and Natural Resources and Committee on Appropriations of the Senate that shall identify—(1) the estimated amount of funds provided by the Department to trade associations, by trade association, for the fiscal year of such budget submission, as well as for the two previous years; (2) the services either provided or to be provided by each such trade association; and (3) the sources of funds for services provided by each such trade association.

Finally, subsection 10(f) requires that (1) each of the amounts authorized by this Act for FY 2000 shall be reduced by 1 percent; (2) each of the amounts authorized by this Act for FY 2000, as reduced pursuant to paragraph (1), shall be further reduced by 0.7674 percent, with such reduction representing a reduction in travel costs; and (3) each of the amounts authorized by this Act for FY 2000 for administrative expenses, including program management, shall be further reduced proportionately to achieve additional savings of \$30,000,000.

#### *Section 11. Management and operating contracts*

Subsection 11(a) prohibits the use of funds authorized by this Act to award a management and operating contract for a federally owned or operated civilian energy laboratory of the Department unless such contract is awarded using competitive procedures or the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver.

In the event the Secretary intends to grant a waiver to the subsection 11(a) prohibition, subsection 11(b) requires the Secretary to submit at least 60 days in advance of such waiver a report to the Committee on Science and the Committee on Appropriations of the House, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, notifying the committees of the waiver and setting forth the reasons for the waiver.

#### *Section 12. Federal acquisition regulation*

Subsection 12(a) prohibits the use of funds authorized by this Act to be used to award, amend, or modify a contract of the Department in a manner that deviates from the FAR unless the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver.

Subsection 12(b) requires that at least 60 days before a contract award, amendment, or modification for which the Secretary intends to grant such a waiver, the Secretary shall submit to the Committee on Science and the Committee on Appropriations of the House, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, a report notifying the committees of the waiver and setting forth the reasons for the waiver.

*Section 13. Requests for proposals*

Subsection 13 prohibits the Department from using funds authorized by this Act to prepare or initiate RFPs for a civilian energy or scientific research, development, and demonstration or commercial application of energy technology program, project, or activity if the program, project or activity has not been specifically authorized by Congress.

*Section 14. Production or provision of articles or services*

Subsection 14 prohibits the use of funds authorized by this Act by any civilian energy or scientific research, development, and demonstration or related commercial application of energy technology programs, project, or activity of the Department to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Secretary determines that comparable articles or services are not available from a commercial source in the United States.

*Section 15. Eligibility for awards*

Subsection 15(a) requires the Secretary to exclude from consideration for grant agreements for civilian energy or scientific research, development, or demonstration or related commercial application of energy technology programs, projects and activities made by the Department after 1999 any person who received funds, other than those described in subsection 15(b), appropriated for a fiscal year after FY 1999, under a grant agreement from any Federal funding source for a project that was not subjected to a competitive, merit-based award process, except as specifically authorized by this Act. Any exclusion from consideration pursuant to this section shall be effective for a period of 5 years after the person receives such Federal funds.

Subsection 15(b) provides that subsection 15(a) shall not apply to the receipt of Federal funds by a person due to the membership of that person in a class specified by law for which assistance is awarded to members of the class according to a formula provided by law, or under circumstances permitting other than full and open competition under the Federal Acquisition Regulation.

Subsection 15(c) defines the term “grant agreement” to mean a legal instrument whose principal purpose is to transfer a thing of value to the recipient to carry out a public purpose of support or stimulation authorized by a law of the United States, and does not include the acquisition (by purchase, lease, or barter) of property or services for the direct benefit or use of the United States Government. Such term also does not include a cooperative agreement (as such term is used in section 6305 of title 31, United States Code) or a cooperative research and development agreement (as such term is defined in section 12(d)(1) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(d)(1)).

*Committee views*

The Committee has a long-standing position that awards should be based on a competitive merit-based process. Merit review allows taxpayers’ dollars to be spent in the most cost-effective manner.

*Section 16. Internet availability of information*

Section 16 requires the Secretary to make available through DOE's Internet home page the abstracts relating to all research grants and awards made with funds authorized by this Act. Nothing in this section shall be construed to require or permit the release of any information prohibited by law or regulation from being released to the public.

*Committee views*

The Committee believes that by giving public access to information about how tax dollars are spent, it is acting as a responsible steward of taxpayer resources. Such information can also stimulate additional public and private sector research by informing the research community.

*Section 17. Foreign visitor program*

Subsection 17(a) prohibits the Secretary from admitting any individual who is a citizen of a nation that is named on the Department of Energy List of Sensitive Countries to any classified area of any federally owned or operated nonmilitary energy laboratory, except as provided in subsection 17(b) or 17(c).

Subsection 17(b) gives the Secretary authority—which may not be delegated—to waive the subsection 17(a) prohibition in on a case-by-case basis with respect to individuals whose admission to a federally owned or operated nonmilitary energy laboratory is determined by the Secretary to be necessary for the furtherance of civilian science interests of the United States; and this authority of the Secretary under paragraph (1). Not later than 30 days after granting such a waiver, the Secretary must transmit to the Committee on Science of the House and the Committee on Energy and Natural Resources of the Senate a report providing notice of the waiver, and which shall include: (1) the identity of each individual for whom a waiver is granted and, with respect to each such individual; and (2) a detailed justification for the waiver; and (3) the Secretary's certification that the admission of that individual to a federally owned or operated nonmilitary energy laboratory is necessary for the furtherance of civilian science interests of the United States.

Subsection 17(c) provides that this section shall not apply to the Ames Laboratory, the Environmental Measurement Laboratory, the Ernest Orlando Lawrence Berkeley National Laboratory, the Federal Energy Technology Center, the Fermi National Accelerator Laboratory, the National Renewable Energy Laboratory, the Princeton Plasma Physics Laboratory, the Radiological and Environmental Sciences Laboratory, the Stanford Linear Accelerator Center, or the Thomas Jefferson National Accelerator Facility.

## VIII. COST ESTIMATE

Rule XIII, clause 3(d)(2) of Rules of the House of Representatives requires that each report of a committee on a public bill or public joint resolution contain: (A) an estimate by the committee of the costs that would be incurred in carrying out the bill or joint resolution in the fiscal year in which it is reported, and in each of the



five fiscal years following that fiscal year (or for the authorized duration of any program authorized by such bill or joint resolution, if less than five years); (B) a comparison of the estimate of costs described in subdivision (A) made by the committee with any estimate of such costs made by a Government agency and submitted to such committee; and (C) when practicable, a comparison of the total estimated funding level for the relevant programs with the appropriate levels under current law. However, House Rule XIII, clause 3(d)(3)(B) provides that this requirement does not apply when a cost estimate and comparison prepared by the Director of the Congressional Budget Office under section 402 of the Congressional Budget Act of 1974 has been included in the report pursuant to House Rule XIII, clause 3(c)(3). A cost estimate and comparison prepared by the Director of the Congressional Budget Office under section 402 of the Congressional Budget Act of 1974 has been timely submitted to the Committee on Science prior to the filing of this report and is included in Section IX of this report pursuant to House Rule XIII, clause 3(c)(3).

Rule XIII, clause 3(c)(2) of the Rule of the House of Representatives requires that the report of a committee on a measure that has been approved by the committee providing new budget authority (other than continuing appropriations), new spending authority, or new credit authority, or changes in revenues or tax expenditures include the statement required by section 308(a) of the Congressional Budget Act of 1974, except that an estimate of new budget authority shall include, when practicable, a comparison of the total estimated funding level for the relevant programs to the appropriate levels under current law. H.R. 1655 does not contain any new budget authority, new spending authority, or new credit authority, or changes in revenues or tax expenditures. Assuming that the sums authorized under the bill are appropriated, H.R. 1655 does authorize additional discretionary spending, as described in the Congressional Budget Office report on the bill, which is contained in Section IX of this report.

#### IX. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

Rule XIII, clause 3(c)(3) of the Rules of the House of Representatives requires that the report of a committee on a measure that has been approved by the committee include an estimate and comparison prepared by the Director of the Congressional Budget Office under section 402 of the Congressional Budget Act of 1974 if timely submitted to the committee before the filing of the report. the Committee on Science has received the following cost estimate for H.R. 1655 from the Director of the Congressional Budget Office:

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, DC, June 18, 1999.*

Hon. F. JAMES SENSENBRENNER, Jr.,  
*Chairman, Committee on Science, House of Representatives, Wash-  
ington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 1655, the Department of Energy Research, Development, and Demonstration Authorization

Act of 1999. This estimate supersedes CBO's June 8 estimate for H.R. 1655 and reflects amendments that were provided to CBO on June 11, 1999.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contacts are Kathleen Gramp (for federal costs) and Lisa Cash Driskill (For the state and local impact).

Sincerely,

BARRY B. ANDERSON  
(For Dan L. Crippen, Director).

Enclosure.

*H.R. 1655—Department of Energy Research, Development, and Demonstration Authorization Act of 1999*

Summary: H.R. 1655 would authorize appropriations for certain civilian research and development (R&D) programs at the Department of Energy (DOE) for fiscal years 2000 and 2001. It would specify authorizations for DOE's basic research programs and for the department's R&D on solar and renewable energy, nuclear power, fossil energy, and energy conservation. The bill would impose various conditions on the expenditure of the funds, including limitations on funding for the Spallation Neutron Source, the International Thermonuclear Experimental Reactor, and other projects and activities. Other provisions would affect procedures for awarding grants and contracts and for admitting foreign visitors to DOE laboratories and facilities.

CBO estimates that appropriation of the specified amounts would result in additional discretionary spending of \$8.0 billion over the 2000–2004 period. H.R. 1655 would not affect direct spending or receipts; therefore, pay-as-you-go procedures would not apply. H.R. 1655 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

Estimated cost to the Federal Government: The estimated budgetary impact of H.R. 1655 is shown in the following table. For the purposes of this estimate, CBO assumes that the amounts authorized by the bill will be appropriated by the start of each fiscal year and that outlays will follow the historical spending patterns for these activities. The costs of this legislation fall within budget functions 250 (general science, space, and technology) and 270 (energy).

	By fiscal year, in millions of dollars—					
	1999	2000	2001	2002	2003	2004
SPENDING SUBJECT TO APPROPRIATION						
Spending Under Current Law:						
Budget Authority .....	<sup>1</sup> 4,497	0	0	0	0	0
Estimated Outlays: .....	4,341	2,216	222	35	0	0
Proposed Changes:						
Authorization Level: .....	0	3,883	4,106	0	0	0
Estimated Outlays .....	0	1,993	3,816	1,963	190	26
Spending Under H.R. 1655:						
Authorization Level .....	<sup>1</sup> 4,497	3,883	4,106	0	0	0
Estimated Outlays .....	4,341	4,209	4,038	1,998	190	26

<sup>1</sup> The 1999 level is the amount appropriated for that year for the four accounts of DOE that fund the programs authorized by this bill. These accounts include some programs that are not covered by the authorizations in this bill. Of the amounts appropriated for 1999, about \$4,046 million was provided for the programs authorized by H.R. 1655.

Pay-as-you-go considerations: None.

Estimated impact on State, local, and tribal governments: H.R. 1655 contains no intergovernmental mandates as defined in UMRA and would impose no costs on State, local, or tribal governments. Currently, about \$600 million of the research and development budgets of the programs affected by this bill goes to universities, some of which are funded by states.

Estimated impact on the private sector: This bill contains no new private-sector mandates as defined in UMRA.

Previous CBO estimate: On June 8, 1999, CBO transmitted a cost estimate for the version of H.R. 1655 provided by the Committee staff on May 26, 1999. That version did not include certain amendments adopted by the Committee when the bill was ordered reported on May 25, 1999. Differences between the estimates are attributable to differences in the two versions. The corrected version of June 11, 1999, contains no authorizations for three existing programs (field operations, Oak Ridge landlord activities, and planning and management for R&D on building systems), which together represented about \$127 million of the amounts shown for each of the fiscal years 2000 and 2001 in the previous estimate. But it adds \$12.5 million over two years for R&D related to gas hydrates. The net change between the two versions' authorization levels is \$122 million for 2000 and \$120 million for 2001.

Estimate prepared by: Federal costs: Kathleen Gramp; impact on State, local, and tribal governments: Lisa Cash Driskill.

Estimate approved by: Robert A. Sunshine, Deputy Assistant Director for Budget Analysis.

#### X. COMPLIANCE WITH PUBLIC LAW 104-4

H.R. 1655 contains no unfunded mandates.

#### XI. COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

Rule XIII, clause 3(c)(1) of the Rules of the House of Representatives requires that the report of a committee on a measure that has been approved by the committee include oversight findings and recommendations under clause 2(b)(1) of rule X. The Committee on Science's oversight findings and recommendations are reflected in the body of this report.

#### XII. OVERSIGHT FINDINGS AND RECOMMENDATIONS BY THE COMMITTEE ON GOVERNMENT REFORM

Rule XIII, clause 3(c)(4) of the Rules of the House of Representatives requires that the report of a committee on a measure that has been approved by the committee include a summary of oversight findings and recommendations made by the Committee on Government Reform under clause 4(c)(2) of rule X if such findings and recommendations have been submitted to the reporting committee in time to allow it to consider such findings and recommendations during its deliberations on the measure. The Committee on Science has received no such findings or recommendations from the Committee on Government Reform.

## XIII. CONSTITUTIONAL AUTHORITY STATEMENT

Rule XIII, clause 3(d)(1) of the Rules of the House of Representatives requires that each report of a committee on a public bill or public joint resolution contain a statement citing the specific powers granted to the Congress in the Constitution to enact the law proposed by the bill or joint resolution. Article I, section 8 of the Constitution of the United States grants Congress the authority to enact H.R. 1655.

## XIV. FEDERAL ADVISORY COMMITTEE STATEMENT

H.R. 1655 does not establish or authorize the establishment of any advisory committee.

## XV. CONGRESSIONAL ACCOUNTABILITY ACT

The Committee finds that H.R. 1655 does not related to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act (Public Law 104-1).

## XVI. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

This legislation does not amend any existing Federal statute.

## XVII. COMMITTEE RECOMMENDATIONS

On May 25, 1999, a quorum being present, the Committee favorably reported H.R. 1655, the Department of Energy Research, Development and Demonstration Authorization Act of 1999, as amended, by a voice vote, and recommended its enactment.

## XVIII. COMMITTEE CORRESPONDENCE

COMMITTEE ON SCIENCE,  
*Washington, DC, July 14, 1999.*

Hon. FLOYD SPENCE,  
*Chairman, Committee on Armed Services, House of Representatives,*  
*Washington, DC.*

DEAR CHAIRMAN SPENCE: After our conversation on the floor regarding H.R. 1655, the Department of Energy Research, Development, and Demonstration Authorization Act of 1999, our respective staffs met to discuss your concerns with the legislation.

It is the intent of the Committee on Science that the amendment regarding foreign visitors to the energy laboratories be confined to these laboratories over which the Committee on Science has jurisdiction. On the advice of the office of the Parliamentarian, the language of the amendment regarding foreign visitors was confined to non-military energy laboratories, which is the clear statement of Science Committee jurisdiction as stated in the Rules of the House.

However, in order to allay your fears that the provisions in our bill may be duplicative or contradictory to the provisions in the DOD Authorization bill, the Science Committee will offer a Manager's amendment on the floor which will clarify that the foreign visitors provision does not apply to the Lawrence Livermore Na-

tional Laboratory, the Los Alamos National Laboratory, the Sandia National Laboratories and Y-12 Plant.

The Committee on Science will make this letter a part of the Report filed on H.R. 1655. Thank you for working with us on this issue.

Sincerely,

F. JAMES SENSENBRENNER, Jr., *Chairman.*

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COMMITTEE ON ARMED SERVICES,  
*Washington, DC, July 15, 1999.*

Hon. F. JAMES SENSENBRENNER, Jr.,  
*Chairman, Committee on Science, House of Representatives, Washington, DC.*

DEAR MR. CHAIRMAN: I write in response to your letter of July 14, 1999 regarding H.R.1655, the Department of Energy Research, Development, and Demonstration Act of 1999.

I appreciate the clarification of the intent of the Committee on Science and the steps taken to modify the provisions addressing the question of foreign visitors to Department of Energy laboratories. As you know, notwithstanding your good faith efforts I remain concerned that provisions contained in H.R. 1655, as ordered reported by the committee, rely on broad and legally undefined terminology to establish scope in a manner that would capture those Department of Energy facilities under the direct jurisdiction of the Committee on Armed Services, principally the national laboratories. Accordingly, I welcome your commitment to offer a Manager's amendment during floor consideration of H.R. 1655 that would specifically exempt the application of the provisions in question to the Lawrence Livermore National Laboratory, the Los Alamos National Laboratory, the Sandia National Laboratories and the Y-12 Plant.

With this commitment, I am prepared to withdraw my request seeking sequential referral of H.R. 1655 and look forward to working with you on the necessary modifications as you bring the bill to the floor. I would appreciate your including a copy of this letter along with your letter of July 14, 1999 as part of the committee report on H.R. 1655.

Sincerely,

FLOYD D. SPENCE, *Chairman.*

## XIX. SUPPLEMENTAL VIEWS

We are concerned about the level of funding provided in the Department of Energy authorization bill for renewable energy and energy efficiency programs. We support funding for these programs at the level of the President's request in fiscal 2000 and at an additional 3 percent in fiscal 2001. Holding funding at close to FY 1999 enacted levels for these programs, as this bill does, amounts to a cut in funding. The majority saw fit to fund other programs in this bill at the level of the President's request, but as in years past, renewable energy and energy efficiency programs have been left behind.

As members of the Science Committee and as concerned citizens, we all should recognize the value of clean energy research and development to our communities and to our world. Renewable energy programs allow America to use its scientific and technological expertise in developing alternative energy sources—such as wind, solar, biomass power, and geothermal energy. These diverse energy resources can decrease our ever-growing dependence on imported oil and reduce environmental impacts of traditional fossil fuels, while expanding our economy through technological advances.

The DOE's renewable energy and energy efficiency programs are a major component of the nation's environmental initiatives. By reducing air pollution and other environmental impacts from energy production and use, they also constitute the single largest and most effective federal pollution prevention program.

Furthermore, investments in sustainable energy technologies meet multiple other public policy objectives. U.S. dependence on imported oil has increased to record levels over the past 25 years. These programs are helping to reduce our reliance on oil imports, thereby strengthening our national security, and also creating hundreds of new domestic businesses, supporting thousands of American jobs, and opening new international markets for American goods and services.

It is estimated that the world market for energy supply equipment and construction over the next 30 years is in the range of several hundred billion dollars per year. America currently leads the world technologically in developing advanced renewable instruments and products, and we should not surrender this lead to foreign competitors.

Past federal support for sustainable energy programs has been key to the rapid growth of emerging renewable technologies. Solar, wind, geothermal, and biomass technologies have together more than tripled their contribution to the nation's energy mix over the past two decades. Including hydropower, renewables now account for about 10 percent of total domestic energy production, and approximately 13 percent of domestic electricity generation.

While these technologies have become increasingly cost-competitive, the pace of their penetration into the market will be determined largely by government support for future research and development as well as by assistance in catalyzing public-private partnerships, leading to full commercialization.

As it stands this bill undermines our progress in this vital area. Not only are these programs valuable to our national security and economy, but they also directly benefit each of our districts. The Department of Energy's clean energy programs help provide strategies and tools to address the environmental challenges we will face in the next century. Handcuffing these programs at 1999 funding levels for the next two years does not give us sufficient flexibility to utilize the potential benefits these programs could provide. We should do better.

MARK UDALL.  
BART GORDON.  
LYNN WOOLSEY.  
ZOE LOFGREN.  
BOB ETHERIDGE.  
ANTHONY D. WEINER.  
JOHN B. LARSON.  
GEORGE E. BROWN, Jr.  
JERRY F. COSTELLO.  
LYNN N. RIVERS.  
DEBBIE STABENOW.  
DAVID WU.  
MICHAEL E. CAPUANO.

XX. PROCEEDINGS OF COMMITTEE ON SCIENCE MARKUP  
**MARKUP ON: H.R. 1655, DEPARTMENT OF EN-  
ERGY RESEARCH, DEVELOPMENT, AND  
DEMONSTRATION AUTHORIZATION ACT OF  
1999**

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**TUESDAY, MAY 25, 1999**

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE,  
*Washington, DC.*

The Committee met, pursuant to notice, at 10:15 a.m., in room 2318, Rayburn House Office Building, Hon. F. James Sensenbrenner, Jr. (chairman of the committee) presiding.

Chairman SENSENBRENNER [presiding]. The Committee on Science will come to order.

Pursuant to notice, the Committee on Science intends to consider the following measures: H.R. 1655, the Department of Energy Research, Development, and Demonstration Act of 1999; H.R. 1656, the Department of Energy Commercial Application of Energy Technology Authorization Act of 1999; H.R. 1742, the Environmental Protection Agency Office of Research and Development and Science Advisory Board Authorization Act of 1999; H.R. 1743, the EPA Office of Air and Radiation Authorization Act of 1999; and H.R. 1744, the National Institute of Standards and Technology Authorization Act of 1999.

Let the Chair state that I have consulted with some of the Democratic members, and it is the Chair's intention to mark these bills up today. And if we go up to the lunch hour, we will have a break for lunch and come back this afternoon. I think it was a consensus that it would be more convenient for the members to finish up today rather than coming back either tomorrow or on Thursday. So, just so that everybody can be advised in planning their day today.

I ask unanimous consent for the authority to recess at any point. And without objection, so ordered.

The first bill up will be H.R. 1655, and I will yield myself five minutes for an opening statement.

This bill authorizes \$4.005 billion for Fiscal Year 2000 and \$4.266 billion for Fiscal Year 2001 for the Department of Energy's Energy Supply, Science, and Fossil Energy R&D and Energy Conservation R&D Program.

Highlights of the bill's authorization for these years include: first, Solar and Renewable Energy Technologies. It boosts spending for Solar and Renewable Energy Technologies. Including the already



authorized Hydrogen Research Program and related Office of Science Program, the bill authorizes \$401.9 million for Fiscal Year 2000, which is an increase of 26.9, or 7.1 percent, over the Fiscal Year 1999 appropriated level; and \$418.1 million for Fiscal Year 2001, an increase of \$16.2 million, or 4 percent, above the amount recommended for Fiscal Year 2000.

For Nuclear Energy, the bill revitalizes the DOE's moribund nuclear energy programs and recommends \$115.7 million for Fiscal Year 2000, which is an increase of \$24.3 million or 26.6 percent over Fiscal Year 1999 appropriated level; and \$3.4 million above the Administration's request; and recommends \$127.3 million for Fiscal Year 2001, an increase of \$11.5 million, or 9.9 percent of the amount above recommended for Fiscal Year 2000.

For High Energy Physics, the bill preserves and strengthens the Nation's High Energy Physics program, fully funds U.S. participation in the Large Hadron Collider at CERN, and prevents layoffs at the two premier High Energy Physics labs—Fermilab and the Stanford Linear Accelerator Center.

For Nuclear Physics, the bill also preserves and strengthens the Nuclear Physics program, prevents the closures of MIT's Bates Linear Accelerator Center and increases operations at the two premier nuclear physics facilities—the Thomas Jefferson National Accelerator Facility and the Relativistic Heavy Ion Collider at Brookhaven.

For Biological and Environmental Research, the bill fully funds important research on the Human Genome Project and global climate change, as well as basic environmental research.

For Basic Energy Sciences, the bill provides robust funding for the core Basic Energy Sciences program, including significant increases to the operating funds for the Nation's existing premier synchrotron and neutron sources.

For fusion, it reinvigorates the Fusion Energy Science program. There is an increase of \$28.5 million, or 12.9 percent above Fiscal Year 1999 appropriated for Fiscal Year 2000, and above the Administration's request. And there is a 10 percent increase for Fiscal Year 2001.

For Fossil Energy R&D, the bill makes a strong commitment to ensuring the clean and efficient use of the Nation's plentiful supply of fossil fuels.

For Energy Conservation, it maintains a strong commitment to energy efficiency, recommending \$503.4 million, which is an increase of \$24.5 million, or 5.5 percent above Fiscal Year 1999 appropriated level, and another \$37.4 million, or 7.4 percent above the recommendation for Fiscal Year 2000.

There are other provisions of the bill. One prohibits the use of funds for High Performance Computing and Communications Program and the Scientific Simulation Initiative. This will be authorized in separate legislation and for the information of my friends on the Democratic side, we intend to give you a discussion draft of what we will be proposing by the end of the week.

It cuts the Administration's Fiscal Year 2000 request for the DOE's bureaucracy by almost \$35 million; cuts wasteful travel by DOE and its contractors by more than 55 percent from current levels, freeing up about \$60 million for research; prohibits non-com-

petitive awards of grants, contracts, and subcontracts, and any other forms of financial assistance to trade associations; limits tech demonstrations to technologies and processes that are substantially new and not for incremental improvements for technologies or processes that already exist in the marketplace; and prohibits DOE and its contractors from competing with the private sector.

I would like to ask unanimous consent that my full opening statement be included in the record, and at this time, I recognize the gentleman from Texas, Mr. Hall, to make an opening statement for the Democratic side.

[The statement of Chairman Sensenbrenner follows:]

OPENING STATEMENT OF CHAIRMAN F. JAMES SENSENBRENNER, JR.

H.R. 1655 authorizes \$4.005 billion for fiscal year (FY) 2000 and \$4.266 billion for FY 2001 for Department of Energy (DOE) Energy Supply, Science, Fossil Energy R&D and Energy Conservation R&D programs. Highlights of the bill's authorizations for fiscal years 2000 and 2001 include:

- Solar and Renewable Energy Technologies—H.R. 1655 boosts spending for Solar and Renewable Energy Technologies. Including the already authorized Hydrogen Research Program and related Office of Science Programs, the bill recommends \$401.9 million in FY 2000 for these programs—an increase of \$26.9 million, or 7.1 percent above the amount appropriated for FY 1999; and recommends \$418.1 million for FY 2001—an increase of \$16.2 million, or 4.0 percent above the amount recommended for FY 2000.

- Nuclear Energy—H.R. 1655 revitalizes DOE's moribund Nuclear Energy Program. The bill recommends \$115.7 million in FY 2000 for Nuclear Energy—an increase of \$24.3 million, or 26.6 percent above the amount appropriated for FY 1999 and \$3.4 million above the Administration's request; and recommends \$127.3 million for FY 2001—an increase of \$11.5 million, or 9.9 percent above the amount recommended for FY 2000.

- High Energy Physics—H.R. 1655 preserves and strengthens the Nation's High Energy Physics program, fully funds U.S. participation on the Large Hadron Collider at CERN and prevents layoffs at the two premier U.S. High Energy Physics facilities—the Fermi National Accelerator Laboratory (Fermilab) and the Stanford Linear Accelerator Center (SLAC). The bill recommends \$715.1 million in FY 2000 for High Energy Physics—an increase of \$21.2 million, or 3.1 percent above the amount appropriated for FY 1999 and \$18.0 million above the Administration's request; and recommends \$753.1 million for FY 2001—an increase of \$38.0 million, or 5.3 percent above the amount recommended for FY 2000.

- Nuclear Physics—H.R. 1655 also preserves and strengthens the Nation's Nuclear Physics program, prevents the closure of MIT/Bates Accelerator Center, and increases operations at the two premier U.S. Nuclear Physics facilities—the Thomas Jefferson National Accelerator Facility and the Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory. The bill recommends \$357.7 million in FY 2000 for Nuclear Physics—an increase of \$23.9 million, or 7.2 percent above the amount appropriated for FY 1999 and \$14.8 million above the Administration's request; and recommends \$375.6 million for FY 2001—an increase of \$20.7 million, or 5.0 percent above the amount recommended for FY 2000.

- Biological and Environmental Research—H.R. 1655 fully funds important research on the Human Genome and global climate change, as well as basic environmental research. The bill recommends \$413.7 million in FY 2000 for Biological and Environmental Research—an increase of \$19.7 million, or 5.0 percent above the amount appropriated for FY 1999 for the base program and \$2.5 million above the Administration's request; and recommends \$434.4 million for FY 2001—an increase of \$20.7 million, or 5.0 percent above the amount recommended for FY 2000.

- Basic Energy Sciences—H.R. 1655 provides robust funding for the core Basic Energy Sciences, including significant increases to the operating funds for the Nation's existing premier synchrotron and neutron sources. The bill recommends \$698.8 million in FY 2000 for the core Basic Energy Sciences programs—an increase of \$33.3 million, or 5.0 percent above the amount appropriated for FY 1999 for the base program and \$31.5 million above the Administration's request; and recommends \$733.7 million for FY 2001—an increase of \$34.9 million, or 5.0 percent above the amount recommended for FY 2000.

- **Fusion Energy Sciences**—H.R. 1655 reinvigorates the Fusion Energy Sciences Program. The bill recommends \$250.0 million in FY 2000 for the Fusion Energy Sciences program—an increase of \$28.5 million, or 12.9 percent above the amount appropriated for FY 1999 and \$27.4 million above the Administration's request; and recommends \$275.0 million for FY 2001—an increase of \$25.0 million, or 10.0 percent above the amount recommended for FY 2000. These funds will allow increased operations at the Nation's three premier Fusion Energy facilities—the DIII-D at General Atomics, the Alcator-C Mod at MIT, and the Princeton Plasma Physics Laboratory—as well as accelerated exploration of advanced magnetic and inertial fusion energy concepts.

- **Fossil Energy R&D**—H.R. 1655 makes a strong commitment to ensuring the clean and efficient use of the Nation's plentiful supply of fossil fuels. The bill recommends \$397.6 million in FY 2000 for the Fossil Energy R&D program—an increase of \$24.5 million, or 6.6 percent above the amount appropriated for FY 1999 and \$43.6 million above the Administration's request; and recommends \$427.1 million for FY 2001—an increase of \$29.3 million, or 7.4 percent above the amount recommended by FY 2000.

- **Energy Conservation R&D**—H.R. 1655 also maintains a strong commitment to energy efficiency, which not only saves energy, but also benefits the environment. The bill recommends \$503.4 million in FY 2000 for Energy Conservation R&D programs—an increase of \$24.5 million, or 5.1 percent above the amount appropriated for FY 1999; and recommends \$540.8 million for FY 2001—an increase of \$37.4 million, or 7.4 percent above the amount recommended for FY 2000. Also included is \$25.0 million in FY 2000 and \$50.0 million in FY 2001 for an Energy Efficiency Science Initiative for grants to be competitively awarded and subject to peer review for research relating to energy efficiency.

Other provisions of the bill include the following:

- Prohibits the use of any funds in the bill for DOE's High Performance Computing and Communications (HPCC) Program and Scientific Simulation (SSI)—which will be authorized by separate legislation, construction of the Spallation Neutron Source (SNS), U.S. participation in International Thermonuclear Experimental Reactor (ITER) Engineering Design Activities (EDA), and for unqualified individuals to hold important positions within the Office of Science;
- Cuts the Administration's FY 2000 request for DOE's bureaucracy by more than \$34.9 million, or 9.7 percent, and does not provide any increases for FY 2001;
- Cuts wasteful travel by DOE and its contractors by more than 55 percent from current levels, thereby freeing up at least an additional \$60 million for research;
- Prohibits noncompetitive awards of grants, contracts, subcontracts, or any other forms of financial assistance to trade associations;
- Limits demonstrations to technologies and processes that are substantially new, and not for incremental improvements for technologies or processes that exist in the marketplace; and
- Prohibits DOE and its contractors from competing with the private sector.

Mr. HALL. Mr. Chairman, I thank you, and I thank you for that very detailed outline of our proceedings; and I also appreciate the fact that you are going to put the entire statement in the record. I was going to ask that that be done had you not made the request. And I presume there is no objection to it. I certainly do not object to it, because I think it will be helpful to us.

At this time, I would like to yield the balance of my time to the Ranking Member of this Subcommittee—of this Committee, Gordon—Congressman Gordon from Tennessee.

Mr. GORDON. Thank you and I am going to yield my time to the Ranking Member of this particular Subcommittee, Mr. Costello.

Mr. COSTELLO. And if I had someone I could yield to, I would. Mr. Chairman, thank you very much. I will insert my statement in the record, but I do want to commend the Chairman and the members of the Committee for putting together a bill before us today regarding programs affecting nuclear energy R&D, fossil energy R&D, and many of the science initiatives, I believe are good in this bill. However, there remains some major concerns that I

think need to be addressed to make this bill acceptable to the science community and to members of this committee.

I will be offering amendments today to address concerns at our national laboratories regarding foreign visitors and U.S. national security. In addition, the majority has recommended that no construction funding be included in the bill for the Spallation Neutron Source, one of the Nation's most important scientific initiatives.

I will offer an amendment to ask the members of the Committee to restore funding for the Spallation Neutron Source, with specific conditions before construction monies can be spent on the project.

And with that, Mr. Chairman, I will insert the rest of my statement in the record.

[The statement of Mr. Costello follows:]

OPENING STATEMENT OF HON. JERRY F. COSTELLO

Thank you Mr. Chairman.

In many ways, I think what the Committee has put together in regard to the programs affecting nuclear energy R&D, fossil energy R&D and many of the science initiatives are good. However, there remain some major concerns that I think need to be addressed to make this bill acceptable to the science community and members of this committee.

I will offer amendments today to address concerns at our national laboratories regarding foreign visitors and US national security. In addition, the majority has recommended that no construction funding be included in the bill for the Spallation Neutron Source, one of the nation's most important scientific initiatives. I will offer an amendment to ask the members of the committee to restore funding for the Spallation Neutron Source.

Thank you very much.

Chairman SENSENBRENNER. Without objection, so ordered. And without objection, all members may insert opening statements in the record at this point.

[The statement of Mr. Calvert follows:]

STATEMENT OF CHAIRMAN KEN CALVERT

Thank you Mr. Chairman. The business before the Committee is the markup of H.R. 1655, which authorizes civilian energy and scientific research, development, demonstration and related commercial applications of energy technology at the Department of Energy for fiscal years 2000 and 2001.

The bill recommends an authorization of \$4.005 billion for fiscal year (FY) 2000 and \$4.27 billion for FY 2001 for Department of Energy (DOE) Energy Supply, Science, Fossil Energy R&D programs. This includes a \$26.8 million, or 7.1 percent, increase in research for Solar and Renewable Resource Technologies, and a \$20.7 million, or 28.1 percent, increase in nuclear energy R&D for FY 2000 over the FY 1999 appropriated levels.

The Core Science budget will also receive a healthy increase over last year's appropriation—our recommended authorization for FY 2000 increases funding by \$90.2 million, which represents a 3.7 percent increase. We add a further 5.5 percent in FY 2001, bringing the two-year grand total increase to \$228.7 million dollars.

The Fossil Energy R&D budget also deserves strong, continued support from this Committee. We are authorizing a 24.5 million dollars, which amounts to a 6.6 percent increase.

I believe that H.R. 1655 promotes the committee's priorities for the future. We provide strong support for solar and renewable energy and nuclear power R&D. These areas are critical to the future energy supply of the United States. We need to enhance and diversify the nation's energy portfolio, while maintaining and extended the life of our existing nuclear infrastructure as we move into the 21st Century.

We also take into account the importance of core scientific research including high-energy physics and fusion energy. This budget funds these areas of "big science" that legitimately need basic government support.

Fossil energy R&D is also critical to the nation's energy security. This country has several hundred years of coal reserves. It would be irresponsible not to continue to explore ways to use coal in a more environmentally friendly and efficient way.

Finally, I would like to endorse Chairman Sensenbrenner's earlier comments on the Spallation Neutron Source (SNS).

With that, I ask my colleagues for their support on this important authorization bill.

Mr. Chairman, I thank you for your time.

Chairman SENSENBRENNER. Without objection, the bill is read a first time and is open for amendment at any point.

[The information follows:]

#### H.R. 1655

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

#### SECTION 1. SHORT TITLE.

This Act may be cited as the "Department of Energy Research, Development, and Demonstration Authorization Act of 1999".

#### SEC. 2. DEFINITIONS.

For the purposes of this Act, the term—

- (1) "Department" means the Department of Energy; and
- (2) "Secretary" means the Secretary of Energy.

#### SEC. 3. AUTHORIZATION OF APPROPRIATIONS.

(a) ENERGY SUPPLY.—There are authorized to be appropriated to the Secretary for Energy Supply civilian energy and scientific research, development, and demonstration and related commercial application of energy technology operation and maintenance and construction programs, projects, and activities for which specific sums are not authorized under other authority of law \$546,178,000 for fiscal year 2000 and \$566,744,000 for fiscal year 2001, to remain available through the end of fiscal year 2002, of which—

(1) \$316,624,000 for fiscal year 2000 and \$325,321,000 for fiscal year 2001 shall be for Solar and Renewable Resources Technologies, including—

(A) \$3,708,000 for fiscal year 2000 and \$3,819,000 for fiscal year 2001 for Solar Building Technology Research;

(B) \$83,345,000 for fiscal year 2000 and \$85,845,000 for fiscal year 2001 for Photovoltaic Energy Systems;

(C) \$17,510,000 for fiscal year 2000 and \$18,035,000 for fiscal year 2001 for Concentrating Solar Power;

(D) \$75,396,000 for fiscal year 2000 and \$77,658,000 for fiscal year 2001 for Biopower/Biofuels Energy Systems;

(E) \$35,814,000 for fiscal year 2000 and \$36,889,000 for fiscal year 2001 for Wind Energy Systems;

(F) \$1,500,000 for fiscal year 2000 and \$1,500,000 for fiscal year 2001 for the Renewable Energy Production Incentive Program;

(G) \$6,000,000 for fiscal year 2000 and \$6,000,000 for fiscal year 2001 for the International Solar Energy Program;

(H) \$1,100,000 for fiscal year 2000 and \$1,100,000 for fiscal year 2001 for the National Renewable Energy Laboratory;

(I) \$29,500,000 for fiscal year 2000 and \$30,385,000 for fiscal year 2001 for Geothermal;

(J) \$3,348,000 for fiscal year 2000 and \$3,448,000 for fiscal year 2001 for Hydropower;

(K) \$41,303,000 for fiscal year 2000 and \$42,542,000 for fiscal year 2001 for Electric Energy Systems and Storage; and

(L) \$18,100,000 for fiscal year 2000 and \$18,100,000 for fiscal year 2001 for Program Direction;

(2) \$115,742,000 for fiscal year 2000 and \$127,256,000 for fiscal year 2001 shall be for Nuclear Energy, including—

(A) \$37,000,000 for fiscal year 2000 and \$37,000,000 for fiscal year 2001 for Advanced Radioisotope Power Systems;

(B) \$6,070,000 for fiscal year 2000 and \$6,070,000 for fiscal year 2001 for Test Reactor Area Landlord operation and maintenance;

(C) \$1,430,000 for fiscal year 2000 and \$1,944,000 for fiscal year 2001 for construction of Project 99–E–200, Test Reactor Area Electric Utility Upgrade, Idaho National Engineering and Environmental Laboratory;

(D) \$1,500,000 for fiscal year 2000 and \$2,500,000 for fiscal year 2001 for construction of Project 95–E–201, Test Reactor Area Fire and Life Safety Improvements, Idaho National Engineering and Environmental Laboratory;

(E) \$13,500,000 for fiscal year 2000 and \$16,000,000 for fiscal year 2001 for University Reactor Fuel Assistance and Support;

(F) \$5,000,000 for fiscal year 2000 and \$7,500,000 for fiscal year 2001 for Nuclear Energy Plant Optimization;

(G) \$30,000,000 for fiscal year 2000 and \$35,000,000 for fiscal year 2001 for the Nuclear Energy Research Initiative; and

(H) \$21,242,000 for fiscal year 2000 and \$21,242,000 for fiscal year 2001 for Program Direction;

(3) \$102,000,000 for fiscal year 2000 and \$102,000,000 for fiscal year 2001 shall be for Field Operations; and

(4) \$11,812,000 for fiscal year 2000 and \$12,166,000 for fiscal year 2001 shall be for Oak Ridge Landlord.

(b) SCIENCE.—There are authorized to be appropriated to the Secretary for Science scientific and civilian energy research, development, and demonstration operation and maintenance and construction programs, projects, and activities for which specific sums are not authorized under other authority of law \$2,557,761,000 for fiscal year 2000 and \$2,691,465,000 for fiscal year 2001, to remain available until expended, of which—

(1) \$715,090,000 for fiscal year 2000 and \$753,110,000 for fiscal year 2001 shall be for High Energy Physics, including—

(A) \$235,190,000 for fiscal year 2000 and \$246,950,000 for fiscal year 2001 for High Energy Physics Research and Technology;

(B) \$451,200,000 for fiscal year 2000 and \$473,760,000 for fiscal year 2001 for High Energy Physics Facility Operations;

(C) \$2,000,000 for fiscal year 2000 and \$5,200,000 for fiscal year 2001 for construction of Project 00–G–307, Research Office Building, Stanford Linear Accelerator Center;

(D) \$4,700,000 for fiscal year 2000 and \$4,200,000 for fiscal year 2001 for construction of Project 99–G–306, Wilson Hall Safety Improvements Project, Fermi National Accelerator Laboratory; and

(E) \$22,000,000 for fiscal year 2000 and \$23,000,000 for fiscal year 2001 for construction of Project 98–G–304, Neutrinos at the Main Injector, Fermi National Accelerator Laboratory;

(2) \$357,714,000 for fiscal year 2000 and \$375,600,000 for fiscal year 2001 shall be for Nuclear Physics;

(3) \$413,674,000 for fiscal year 2000 and \$434,357,000 for fiscal year 2001 shall be for Biological and Environmental Research;

(4) \$698,800,000 for fiscal year 2000 and \$733,740,000 for fiscal year 2001 shall be for Basic Energy Sciences, including—

(A) \$405,390,000 for fiscal year 2000 and \$425,660,000 for fiscal year 2001 for Materials Sciences Research and Facilities Operations;

(B) \$217,179,000 for fiscal year 2000 and \$228,038,000 for fiscal year 2001 for Chemical Sciences Research and Facilities Operations;

(C) \$18,820,000 for fiscal year 2000 and \$19,761,000 for fiscal year 2001 for Engineering Research;

(D) \$26,056,000 for fiscal year 2000 and \$27,359,000 for fiscal year 2001 for Geosciences Research; and

(E) \$31,355,000 for fiscal year 2000 and \$32,923,000 for fiscal year 2001 for Energy Biosciences;

(5) \$31,474,000 for fiscal year 2000 and \$32,333,000 for fiscal year 2001 shall be for Computational and Technology Research, including—

(A) \$17,174,000 for fiscal year 2000 and \$18,033,000 for fiscal year 2001 for Mathematical, Information, and Computational Sciences; and

(B) \$14,300,000 for fiscal year 2000 and \$14,300,000 for fiscal year 2001 for Laboratory Technology Research;

(6) \$1,000,000 for fiscal year 2000 and \$1,000,000 for fiscal year 2001 shall be for Energy Research Analysis;

(7) \$22,323,000 for fiscal year 2000 and \$23,439,000 for fiscal year 2001 shall be for Multiprogram Energy Laboratories—Facility Support;

(8) \$250,000,000 for fiscal year 2000 and \$275,000,000 for fiscal year 2001 shall be for Fusion Energy Sciences, including \$13,600,000 for fiscal year 2000

and \$19,400,000 for fiscal year 2001 for Tokamak Fusion Test Reactor Decontamination and Decommissioning;

(9) \$49,800,000 for fiscal year 2000 and \$49,800,000 for fiscal year 2001 shall be for Science Program Direction; and

(10) \$17,900,000 for fiscal year 2000 and \$13,100,000 for fiscal year 2001 shall be for Spallation Neutron Source research and development.

(c) FOSSIL ENERGY RESEARCH AND DEVELOPMENT.—There are authorized to be appropriated to the Secretary for Fossil Energy Research and Development civilian energy and scientific research, development, and demonstration and related commercial application of energy technology operation and maintenance programs, projects, and activities for which specific sums are not authorized under other authority of law \$397,564,000 for fiscal year 2000 and \$427,102,000 for fiscal year 2001, to remain available through the end of fiscal year 2002, of which—

(1) \$126,609,000 for fiscal year 2000 and \$126,614,000 for fiscal year 2001 shall be for Coal, including—

(A) \$5,250,000 for fiscal year 2000 and \$5,407,000 for fiscal year 2001 for Coal Preparation;

(B) \$1,641,000 for fiscal year 2000 for Direct Liquefaction;

(C) \$6,659,000 for fiscal year 2000 and \$6,859,000 for fiscal year 2001 for Indirect Liquefaction;

(D) \$2,200,000 for fiscal year 2000 and \$2,310,000 for fiscal year 2001 for Advanced Clean Fuels Research Advanced Research and Environmental Technology;

(E) \$3,000,000 for fiscal year 2000 for Advanced Pulverized Coal-Fired Powerplant;

(F) \$7,010,000 for fiscal year 2000 and \$7,220,000 for fiscal year 2001 for Indirect Fired Cycle;

(G) \$38,661,000 for fiscal year 2000 and \$39,821,000 for fiscal year 2001 for High-Efficiency-Integrated Gasification Combined Cycle;

(H) \$15,077,000 for fiscal year 2000 and \$15,529,000 for fiscal year 2001 for High-Efficiency Pressurized Fluidized Bed;

(I) \$23,864,000 for fiscal year 2000 and \$25,057,000 for fiscal year 2001 for Advanced Clean/Efficient Power Systems Advanced Research and Environmental Technology; and

(J) \$23,247,000 for fiscal year 2000 and \$24,410,000 for fiscal year 2001 for Advanced Research and Technology Development;

(2) \$50,574,000 for fiscal year 2000 and \$52,091,000 for fiscal year 2001 shall be for Oil Technology, including—

(A) \$31,720,000 for fiscal year 2000 and \$32,671,000 for fiscal year 2001 for Exploration and Production Supporting Research;

(B) \$8,034,000 for fiscal year 2000 and \$8,275,000 for fiscal year 2001 for Recovery Field Demonstrations; and

(C) \$10,820,000 for fiscal year 2000 and \$11,145,000 for fiscal year 2001 for Oil Technology Effective Environmental Protection;

(3) \$107,916,000 for fiscal year 2000 and \$108,831,000 for fiscal year 2001 shall be for Gas, including—

(A) \$14,932,000 for fiscal year 2000 and \$15,380,000 for fiscal year 2001 for Natural Gas Research Exploration and Production;

(B) \$1,030,000 for fiscal year 2000 and \$1,061,000 for fiscal year 2001 for Natural Gas Research Delivery and Storage;

(C) \$41,808,000 for fiscal year 2000 and \$41,808,000 for fiscal year 2001 for Natural Gas Research Advanced Turbine Systems;

(D) \$9,330,000 for fiscal year 2000 and \$9,610,000 for fiscal year 2001 for Natural Gas Research Emerging Processing Technology Applications;

(E) \$3,108,000 for fiscal year 2000 and \$3,201,000 for fiscal year 2001 for Natural Gas Effective Environmental Protection;

(F) \$1,260,000 for fiscal year 2000 and \$1,323,000 for fiscal year 2001 for Fuel Cells Advanced Research; and

(G) \$36,449,000 for fiscal year 2000 and \$36,449,000 for fiscal year 2001 for Fuel Cells Systems;

(4) \$71,114,000 for fiscal year 2000 and \$72,796,000 for fiscal year 2001 shall be for Program Direction and Management Support, including—

(A) \$15,049,000 for fiscal year 2000 and \$15,049,000 for fiscal year 2001 for Headquarters Program Direction; and

(B) \$56,065,000 for fiscal year 2000 and \$57,747,000 for fiscal year 2001 for Energy Technology Center Program Direction;

(5) \$2,000,000 for fiscal year 2000 and \$2,060,000 for fiscal year 2001 shall be for GP-F-100, Plant and Capital Equipment, at Energy Technology Center sites;

(6) \$7,148,000 for fiscal year 2000 and \$7,537,000 for fiscal year 2001 shall be for Cooperative Research and Development;

(7) \$2,173,000 for fiscal year 2000 and \$2,173,000 for fiscal year 2001 shall be for Fuels Conversion, Natural Gas, and Electricity;

(8) \$5,000,000 for fiscal year 2000 and \$5,000,000 for fiscal year 2001 shall be for Advanced Metallurgical Processes; and

(9) \$25,000,000 for fiscal year 2000 and \$50,000,000 for fiscal year 2001 shall be for a Fossil Energy Science Initiative to be managed by the Assistant Secretary for Fossil Energy in consultation with the Director of the Office of Science, for grants to be competitively awarded and subject to peer review for research relating to fossil energy.

(d) ENERGY CONSERVATION RESEARCH AND DEVELOPMENT.—There are authorized to be appropriated to the Secretary for Energy Conservation Research and Development civilian energy and scientific research, development, and demonstration and related application of energy technology operation and maintenance programs, projects, and activities for which specific sums are not authorized under other authority of law \$503,383,000 for fiscal year 2000 and \$540,797,000 for fiscal year 2001, to remain available through the end of fiscal year 2002, of which—

(1) \$204,935,000 for fiscal year 2000 and \$210,845,000 for fiscal year 2001 shall be for the Transportation Sector, including—

(A) \$129,714,000 for fiscal year 2000 and \$133,606,000 for fiscal year 2001 for Vehicle Technology Research and Development;

(B) \$23,500,000 for fiscal year 2000 and \$24,205,000 for fiscal year 2001 for Fuels Utilization Research and Development;

(C) \$5,196,000 for fiscal year 2000 and \$5,352,000 for fiscal year 2001 for Technology Deployment;

(D) \$38,599,000 for fiscal year 2000 and \$39,757,000 for fiscal year 2001 for Materials Technology; and

(E) \$7,925,000 for fiscal year 2000 and \$7,925,000 for fiscal year 2001 for Management and Planning;

(2) \$155,131,000 for fiscal year 2000 and \$159,534,000 for fiscal year 2001 shall be for the Industry Sector, including—

(A) \$59,180,000 for fiscal year 2000 and \$60,955,000 for fiscal year 2001 for Industries of the Future (Specific);

(B) \$87,600,000 for fiscal year 2000 and \$90,228,000 for fiscal year 2001 for Industries of the Future (Crosscutting); and

(C) \$8,351,000 for fiscal year 2000 and \$8,351,000 for fiscal year 2001 for Management and Planning;

(3) \$83,185,000 for fiscal year 2000 and \$85,286,000 for fiscal year 2001 shall be for the Building Technology, State and Community Sector (nongrants), including—

(A) \$55,870,000 for fiscal year 2000 and \$57,546,000 for fiscal year 2001 for Building Research;

(B) \$14,144,000 for fiscal year 2000 and \$14,568,000 for fiscal year 2001 for Building Technology Assistance (nongrants); and

(C) \$13,171,000 for fiscal year 2000 and \$13,171,000 for fiscal year 2001 for Management and Planning;

(4) \$35,132,000 for fiscal year 2000 and \$35,132,000 for fiscal year 2001 shall be for Policy and Management; and

(5) \$25,000,000 for fiscal year 2000 and \$50,000,000 for fiscal year 2001 shall be for an Energy Efficiency Science Initiative to be managed by the Assistant Secretary for Energy Efficiency and Renewable Energy in consultation with the Director of the Office of Science, for grants to be competitively awarded and subject to peer review for research relating to energy efficiency.

#### SEC. 4. NOTICE.

(a) REPROGRAMMING.—The Secretary may use for any authorized activities of the Department under this Act—

(1) up to the lesser of \$250,000 or 5 percent of the total funding for a fiscal year of a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology program, project, or activity of the Department; or

(2) after the expiration of 60 days after transmitting to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on



Appropriations of the Senate, a report described in subsection (b), up to 25 percent of the total funding for a fiscal year of a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology program, project, or activity of the Department.

(b) REPORT.—(1) The report referred to in subsection (a)(2) is a report containing a full and complete statement of the action proposed to be taken and the facts and circumstances relied upon in support of such proposed action.

(2) In the computation of the 60-day period under subsection (a)(2), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.

(c) LIMITATIONS.—In no event may funds be used pursuant to subsection (a) for a program, project, or activity for which funding has been requested to the Congress but which has not been funded by the Congress.

(d) NOTICE OF REORGANIZATION.—The Secretary shall provide notice to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, not later than 15 days before any major reorganization of any civilian energy or scientific research, development, or demonstration or related commercial application of energy technology program, project, or activity of the Department.

(e) COPY OF REPORTS.—The Secretary shall provide copies to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, of any report relating to the civilian energy or scientific research, development, or demonstration or related commercial application of energy technology programs, projects, and activities of the Department prepared at the direction of any committee of Congress.

#### SEC. 5. LIMITATION ON DEMONSTRATIONS.

The Department of Energy shall provide funding for civilian energy or scientific or related commercial application of energy technology demonstration programs, projects, and activities only for technologies or processes that are substantially new, and not for incremental improvements to technologies or processes that exist in the marketplace.

#### SEC. 6. LIMITS ON GENERAL PLANT PROJECTS.

If, at any time during the construction of a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology project of the Department for which no specific funding level is provided by law, the estimated cost (including any revision thereof) of the project exceeds \$500,000, the Secretary may not continue such construction unless the Secretary has furnished a complete report to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, explaining the project and the reasons for the estimate or revision.

#### SEC. 7. LIMITS ON CONSTRUCTION PROJECTS.

(a) LIMITATION.—Except as provided in subsection (b), construction on a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology project of the Department for which funding has been specifically provided by law may not be started, and additional obligations may not be incurred in connection with the project above the authorized funding amount, whenever the current estimated cost of the construction project exceeds by more than 5 percent the higher of—

(1) the amount authorized for the project, if the entire project has been funded by the Congress; or

(2) the amount of the total estimated cost for the project as shown in the most recent budget justification data submitted to Congress.

(b) NOTICE.—An action described in subsection (a) may be taken if—

(1) the Secretary has submitted to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, a report on the proposed actions and the circumstances making such actions necessary; and

(2) a period of 60 days has elapsed after the date on which the report is received by the committees.

(c) EXCLUSION.—In the computation of the 60-day period described in subsection (b)(2), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.

#### SEC. 8. AUTHORITY FOR CONCEPTUAL AND CONSTRUCTION DESIGN.

(a) REQUIREMENT FOR CONCEPTUAL DESIGN.—(1) Subject to paragraph (2) and except as provided in paragraph (3), before submitting to Congress a request for funds for a construction project that is in support of a civilian energy or scientific research, development, or demonstration or related commercial application of energy technology program, project, or activity of the Department, the Secretary shall complete a conceptual design for that project.

(2) If the estimated cost of completing a conceptual design for a construction project exceeds \$500,000, the Secretary shall submit to Congress a request for funds for the conceptual design before submitting a request for funds for the construction project.

(3) The requirement in paragraph (1) does not apply to a request for funds for a construction project, the total estimated cost of which is less than \$1,000,000.

(b) AUTHORITY FOR CONSTRUCTION DESIGN.—(1) The Secretary may carry out construction design (including architectural and engineering services) in connection with any proposed construction project that is in support of a civilian energy or scientific research, development, and demonstration or related commercial application of energy technology program, project, or activity of the Department if the total estimated cost for such design does not exceed \$100,000.

(2) If the total estimated cost for construction design in connection with any construction project described in paragraph (1) exceeds \$100,000, funds for such design must be specifically authorized by law.

#### SEC. 9. LIMITS ON USE OF FUNDS.

(a) HIGH PERFORMANCE COMPUTING AND COMMUNICATIONS (HPCC) PROGRAM.—None of the funds authorized by this Act may be used for the Department's High Performance Computing and Communications (HPCC) Program.

(b) SCIENTIFIC SIMULATION INITIATIVE (SSI).—None of the funds authorized by this Act may be used for the Department's Scientific Simulation Initiative (SSI).

(c) CONSTRUCTION OF THE SPALLATION NEUTRON SOURCE (SNS).—None of the funds authorized by this Act may be used for the construction of the Project 99-E-334, the Spallation Neutron Source (SNS) at Oak Ridge National Laboratory.

(d) INTERNATIONAL THERMONUCLEAR EXPERIMENTAL REACTOR (ITER) ENGINEERING DESIGN ACTIVITIES (EDA).—None of the funds authorized by this Act may be used either directly or indirectly for United States participation in International Thermonuclear Experimental Reactor (ITER) Engineering Design Activities (EDA).

(e) OFFICE OF SCIENCE.—None of the funds authorized by this Act may be used either directly or indirectly to fund the salary of an individual holding the position of Director or Deputy Director of the Office of Science, or Associate Director (except for the Office of Laboratory Policy and the Office of Resource Management), or Director, Office of Planning and Analysis within the Department's Office of Science unless such individual holds a postgraduate degree in science or engineering.

(f) TRAVEL.—Not more than 1 percent of the funds authorized by this Act may be used either directly or indirectly to fund travel costs of the Department or travel costs for persons awarded grants, contracts, subcontracts, or any other form of financial assistance by the Department. As part of the Department's annual budget request submission to the Congress, the Secretary shall submit a report to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, that identifies—

(1) the estimated amount of travel costs by the Department and for persons awarded grants, contracts, subcontracts, or any other form of financial assistance by the Department for the fiscal year of such budget submission, as well as for the 2 previous fiscal years;

(2) the major purposes for such travel; and

(3) the sources of funds for such travel.

(g) TRADE ASSOCIATIONS.—No funds authorized by this Act may be used either directly or indirectly to fund a grant, contract, subcontract, or any other form of financial assistance awarded by the Department to a trade association on a noncompetitive basis. As part of the Department's annual budget request submission to the Congress, the Secretary shall submit a report to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, that identifies—

(1) the estimated amount of funds provided by the Department to trade associations, by trade association, for the fiscal year of such budget submission, as well as for the 2 previous fiscal years;

(2) the services either provided or to be provided by each such trade association; and

(3) the sources of funds for services provided by each such trade association.

**SEC. 10. MANAGEMENT AND OPERATING CONTRACTS.**

(a) **COMPETITIVE PROCEDURE REQUIREMENT.**—None of the funds authorized to be appropriated by this Act for civilian energy or scientific research, development, and demonstration or related commercial application of energy technology programs, projects, and activities may be used to award a management and operating contract for a federally owned or operated civilian energy laboratory of the Department unless such contract is awarded using competitive procedures or the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver.

(b) **CONGRESSIONAL NOTICE.**—At least 60 days before a contract award, amendment, or modification for which the Secretary intends to grant such a waiver, the Secretary shall submit to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, a report notifying the committees of the waiver and setting forth the reasons for the waiver.

**SEC. 11. FEDERAL ACQUISITION REGULATION.**

(a) **REQUIREMENT.**—None of the funds authorized to be appropriated by this Act for civilian energy or scientific research, development, and demonstration or related commercial application of energy technology programs, projects, and activities may be used to award, amend, or modify a contract of the Department in a manner that deviates from the Federal Acquisition Regulation, unless the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver.

(b) **CONGRESSIONAL NOTICE.**—At least 60 days before a contract award, amendment, or modification for which the Secretary intends to grant such a waiver, the Secretary shall submit to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, a report notifying the committees of the waiver and setting forth the reasons for the waiver.

**SEC. 12. REQUESTS FOR PROPOSALS.**

None of the funds authorized to be appropriated by this Act may be used by the Department to prepare or initiate Requests for Proposals (RFPs) for a civilian energy or scientific research, development, and demonstration or related commercial application of energy technology program, project, or activity if the program, project, or activity has not been specifically authorized by Congress.

**SEC. 13. PRODUCTION OR PROVISION OF ARTICLES OR SERVICES.**

None of the funds authorized to be appropriated by this Act may be used by any civilian energy or scientific research, development, and demonstration or related commercial application of energy technology program, project, or activity of the Department to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Secretary determines that the articles or services are not available from a commercial source in the United States.

**SEC. 14. ELIGIBILITY FOR AWARDS.**

(a) **IN GENERAL.**—The Secretary shall exclude from consideration for grant agreements for civilian energy and scientific research, development, and demonstration or related commercial application of energy technology programs, projects, and activities made by the Department after fiscal year 1999 any person who received funds, other than those described in subsection (b), appropriated for a fiscal year after fiscal year 1999, under a grant agreement from any Federal funding source for a program, project, or activity that was not subjected to a competitive, merit-based award process, except as specifically authorized by this Act. Any exclusion from consideration pursuant to this section shall be effective for a period of 5 years after the person receives such Federal funds.

(b) **EXCEPTION.**—Subsection (a) shall not apply to the receipt of Federal funds by a person due to the membership of that person in a class specified by law for which assistance is awarded to members of the class according to a formula provided by law.

(c) **DEFINITION.**—For purposes of this section, the term “grant agreement” means a legal instrument whose principal purpose is to transfer a thing of value to the recipient to carry out a public purpose of support or stimulation authorized by a law of the United States, and does not include the acquisition (by purchase, lease, or

barter) of property or services for the direct benefit or use of the United States Government. Such term does not include a cooperative agreement (as such term is used in section 6305 of title 31, United States Code) or a cooperative research and development agreement (as such term is defined in section 12(d)(1) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(d)(1))).

Chairman SENSENBRENNER. The first amendment on the roster is a managers' amendment by the gentleman from California, Mr. Calvert, and the gentleman from Illinois, Mr. Costello.

For what purpose does the gentleman from California seek recognition?

Mr. CALVERT. Mr. Chairman, I have a amendment at the desk.

Chairman SENSENBRENNER. The clerk will report the amendment.

Mr. CALVERT. There has been a change in that amendment, Mr. Chairman, I agreed to, between myself and Mr. Costello, striking the prohibition of HPC and IT-squared, and I ask that amendment to be substituted for the original managers' amendment.

Chairman SENSENBRENNER. Without objection, and the clerk will report the revised amendment while it is being passed out.

The CLERK. Amendment to H.R. 1655, offered by Mr. Calvert and Mr. Costello. Page 2, line 18—

Chairman SENSENBRENNER. Without objection, the amendment is considered as read, and the gentleman from California, Mr. Calvert is recognized for five minutes.

[The information follows:]

Page 2, line 18, strike "\$546,187,000" and insert "\$432,366,000".

Page 2, line 18, strike "\$566,744,000" and insert "\$452,577,000".

Page 4, line 9, insert "and" after "Direction;".

Page 5, line 15, strike the semicolon and insert a period.

Page 5, lines 16 through 21, strike paragraphs (3) and (4).

Page 8, line 17, strike "\$22,323,000" and insert "\$22,309,000".

Page 8, line 18, strike "\$23,439,000" and insert "\$22,425,000".

Page 13, line 18, insert "The Secretary shall submit to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, an annual report on the activities of the Fossil Energy Science Initiative, including a description of the process used to award the funds and an explanation of how the research relates to fossil energy." after "relating to fossil energy."

Page 14, line 1, strike "\$503,383,000" and insert "\$490,212,000".

Page 14, line 2, strike "\$540,797,000" and insert "\$527,626,000".

Page 15, line 10, strike "\$83,185,000" and insert "\$70,014,000".

Page 15, line 11, strike "\$85,286,000" and insert "\$72,115,000".

Page 15, line 16, insert "and" after "Research;".

Page 15, lines 19 through 22, strike "; and" and all that follows through "and Planning".

Page 16, line 8, insert "The Secretary shall submit to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, an annual report on the activities of the Energy Efficiency Science Initiative, including a description of the process used to award the funds and an explanation of how the research relates to energy efficiency." after "relating to energy efficiency."

Page 18, lines 13 through 20, amend section 5 to read as follows:

#### SEC. 5. LIMITATION ON DEMONSTRATIONS.

The Department shall provide funding for civilian energy or scientific or related commercial application of energy technology demonstration programs, projects, and activities only for technologies or processes that can be reasonably expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

Page 19, line 3, strike "\$500,000" and insert "\$2,000,000".

Page 19, line 19, strike "5" and insert "10".

Page 20, line 10, strike "60" and insert "30".  
 Page 20, line 13, strike "60" and insert "30".  
 Page 20, after line 17, insert the following new subsection:  
 (d) EXCEPTION.—Subsections (a) and (b) shall not apply to any construction project which has a current estimated cost of less than \$2,000,000.  
 Page 21, line 5, strike "\$500,000" and insert "\$750,000".  
 Page 21, line 11, strike "\$1,000,000" and insert "\$2,000,000".  
 Page 21, line 20, strike "\$100,000" and insert "\$250,000".  
 Page 21, line 23, strike "\$100,000" and insert "\$250,000".  
 Page 23, lines 9 and 10, strike "grants, contracts, subcontracts, or any other form of financial assistance" and insert "contracts or subcontracts".  
 Page 23, lines 19 through 21, strike "grants, contracts, subcontracts, or any other form of financial assistance" and insert "contracts or subcontracts".  
 Page 27, line 5, strike "that the articles" and insert "that comparable articles".  
 Page 28, line 2, insert "or under circumstances permitting other than full and open competition under the Federal Acquisition Regulation" after "provided by law".

Mr. CALVERT. Thank you, Mr. Chairman. I offer this managers' amendment on behalf of myself and my good friend the Ranking Minority Member of the Subcommittee on Energy and Environment, the gentleman from Illinois, Mr. Costello.

The bipartisan managers' amendment makes technical and conforming changes to H.R. 1655 as introduced, adds reporting requirements to the provisions in the bill dealing with fossil energy and energy efficiency initiatives, clarifies the intent of the limitations on demonstrations section, raises the limits on the provisions dealing with general plant projects, construction projects and authority for conceptual and construction designs, and clarifies the intent of the production or the provision of articles or services and the eligibility of awards sections.

Furthermore, as a result of bipartisan consultations with the Commerce Committee, this managers' amendment also transferred the Field Operations, Oak Ridge Landlord, and Building Technology Stair and Community Sector Management and Planning line items to H.R. 1656.

I want to thank my good friend for his cooperation in crafting this bipartisan managers' agreement amendment, and ask my colleagues for their support. With that, I would like to yield back the balance of my time to my good friend, the gentleman from Illinois, Mr. Costello.

Mr. COSTELLO. I thank Chairman Calvert for yielding and just want to indicate to the Chair and to the members of the Committee that we are in agreement with the en bloc amendment. We have worked on this amendment together. Thank you.

Chairman SENSENBRENNER. The question is on agreeing to the amendment of the gentleman from California, Mr. Calvert.

Those in favor will signify by saying aye.

Opposed, no.

The ayes appear to have it. The ayes have it and the amendment is agreed to.

Amendment number two is by the other gentleman from California, Mr. Rohrabacher. For what purpose does he seek recognition?

Mr. ROHRABACHER. I have an amendment at the desk.

Chairman SENSENBRENNER. The clerk will report the amendment.

The CLERK. Amendment to H.R. 1655, offered by Mr. Rohrabacher—

Chairman SENSENBRENNER. Without objection, the amendment is considered as read, and the gentleman from California, Mr. Rohrabacher is recognized for five minutes.

[The information follows:]

Page 3, line 6, insert “, of which \$2,000,000 for fiscal year 2000 and \$3,000,000 for fiscal year 2001 shall be for experimental beamed power technology demonstrations” after “Solar Power”.

Mr. ROHRABACHER. Mr. Chairman, the amendment I have to offer this morning represents a significant opportunity to couple NASA and the DOE in the effort to produce clear, cost-effective solar energy—and that is clean, cost-effective solar energy. In coordination with NASA, we have the opportunity to research and perfect a technology that enables the transference of power from Earth to space and back to Earth.

The amendment requires the Department of Energy to invest a small amount each year in experimental technology demonstrations of wireless power transmission on Earth and in space. The Concentrated Solar Power Program funds research on distributed and dispatchable power generation, aimed primarily at meeting remote or peak demands for energy.

Beginning in Fiscal Year 1998, NASA reinitiated analysis and technology investments pertaining to space-solar power. NASA has concluded that significant amounts of solar energy can be collected in space for use in space or transmission to the ground. While the cause I excuse me—while the use of space-collected solar energy may not be economic now, there are nearer-term applications of this research for both space and terrestrial energy needs, as well as, of course, long-term benefits when the price of energy goes up 10 years from now and does make it economic.

Among the primary areas of research we are taking about is beamed power, the transmission of energy over long distances via microphone and laser transmission. This technology has direct application for terrestrial energy production and distribution. For example, it allows geographically-isolated, but energy-rich, regions to become energy exporters, without the cost of other type of things—like, for example, transporting fuel or erecting electrical power lines, which, of course, are every costly. It allows for remote areas requiring more baseline power or areas requiring surplus power during peak demands to receive distributed energy.

This technology also has immediate application that is important to our space goals. For example, in scientific research, space probes will be able to use this energy for energy-intensive microgravity research, as well as in commercial development where you have cheaper and higher power available for satellites and the space station.

And finally, let me note that at a hearing, the Department of Energy posture hearing on Wednesday, May 14, 1979—1997, that is—I asked DOE about the possibility of looking into this issue in terms of beaming power from space. This was a Department of Energy posture hearing. “Is the Department of Energy willing to work with NASA,” I asked, in developing some technology that might be necessary to exploit this potential resource?” And Department of Energy Secretary Pena stated, and I quote, “Congressman, we have a number of relationships with NASA already, and we would be

very happy to explore that new and exciting interesting idea that NASA has uncovered, meaning the transmission solar power from space to the Earth."

And, again, this is not a large amount of money. We are talking about just a couple million dollars per year for just two years. And I believe that it will open up great new doors for us in the future and would ask the support of my colleagues.

Chairman SENSENBRENNER. Is there further discussion on the Rohrabacher amendment?

Mr. UDALL. Mr. Chairman. Mr. Chairman.

Chairman SENSENBRENNER. Who seeks recognition? The gentleman from Colorado, Mr. Udall, for what purpose do you seek recognition?

Mr. UDALL. I move to strike the requisite number of words.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. UDALL. Thank you, Mr. Chairman. I had a brief comment, and I wanted to extend a couple of questions to my colleague from California.

I applaud, as I have throughout the hearings on these—this legislation, the interest of my colleague in increasing our research in the area of renewable energy. And I think it just points out why we need to keep doing more of this. I am going to offer a couple of amendments later on that speak to this. I am concerned that from what I understand this would take some of the resources that are available for some of our other renewable energy research and would be curious to hear from colleagues about how this, how he sees this all working out?

Mr. ROHRABACHER. We have—we have not received any information that this would, in any way, diminish other research that this money would be used for. It comes out of the general research fund, which is designed and has already been allocated for this type of projected energy beam. But if the gentleman has some information—we do not have information of where this would diminish other research projects.

Mr. UDALL. Well, I thank the gentleman. I—from what I have heard, and we ought to maybe keep the conversation going down the road that this would cut into funds that have already been reduced. And I think it just points to, if I could make the comment, that with the interest I think in this Committee, I would hope that later on, when we consider these other amendments, to make sure that we at least keep our—we stay at previous levels, with a small increase for inflation, our renewable area that he will look on this favorably.

Mr. ROHRABACHER. Well, would the gentleman yield further?

Mr. UDALL. I would be happy to yield.

Mr. ROHRABACHER. From what I understand, this comes out of an account that was already funded at \$20 million, and this is—we have not been told by the Department of Energy that this would hurt any of their projects that are ongoing. And, again, we have tried to make requests and not received information back. However, let me say that the purpose that that fund was established for at the Department of Energy is specifically what we are doing here. This is not inconsistent with what they were tasked to do. So,

we are not taking money from a group that has already been tasked to do something for renewable energy and putting it in something that is not renewable. And, in fact, this gives us a lot more bang for our buck for that very end, because we are trying to combine it with NASA so that we will be able to do it. It is like we have joint ventures between the Department of Defense and NASA sometimes. Well, this is a combined effort with the Department of Energy for it to meet our energy demands in the future, not just our national security demands.

So, in a way, we are getting a lot more bang for the buck for the very goal that you have in mind.

Mr. UDALL. I would yield back the remainder of my time.

Chairman SENSENBRENNER. The gentleman from Michigan, Mr. Ehlert, for what purpose do you seek recognition?

Mr. EHLERS. I move to strike the last word.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. EHLERS. Thank you, Mr. Chairman. I have several questions on this. It is just not clear to me, on this particular project, how is the energy to be beamed, and where is it being beamed from, and to where is it being beamed. I would yield to the gentleman for some answers.

Mr. ROHRBACHER. Would the gentleman yield? I would yield so I may answer his questions?

Mr. EHLERS. Yes, I yield.

Mr. ROHRBACHER. This is a purely experimental project. We are talking about developing laser and microwave technology that some research has already been done on, but in order to have demonstration—a demonstration technology. In a way, I guess what we are saying is that the money will be spent in developing that technology that will be able to beam from the Earth to a satellite, or from a satellite to the Earth, of energy, whether that energy is produced by, for example, clean natural gas that they are now flaring in Central Asia or be beamed by energy that could be produced in space by the collection of large solar collectors in space, and then beamed to Earth.

So, what we are doing by this—with this particular allocation is perfecting the technology necessary through microwave or laser to transfer technology—wireless transfers of technology—of energy, excuse me.

Mr. EHLERS. Reclaiming my time—about 30 years ago, this was being proposed and quite a bit of work was done on it, at least theoretical work; and was dropped as being unfeasible for one reason or another. Economics was the one problem; another was the so-called fried goose syndrome, where geese flying through the microwave beams of such high energy would be damaged. Is this a new look at the same thing or is this a totally different approach?

Mr. ROHRBACHER. It is a new look. I do believe that in the last 30 years that we have had a great deal of progress, especially in terms of—where, not only in the SDI Program, but other programs in terms of beaming energy. And so there has been a great deal of progress made in this area, and yes, it is a new look at the old goals. And perhaps with microwave—it will look at microwaves as well as lasers. And with a microwave system, it would be very low



intensity and would not fry the geese. And that is what we want to determine: whether or not we can do it in a way that will be totally compatible with our environmental standards.

Mr. EHLERS. At the request of the gentleman from Florida, I will yield to him.

Mr. WELDON of Florida. I thank the gentleman for yielding, and I commend the Committee Chairman of the Space Subcommittee for offering this amendment. This is an area that I have taken some interest in, primarily from the perspective of solar power collection. And I have specifically talked to the scientists who have done work in this area, and they have assured me with the current technology that exists today that the so-called fried goose issue is not operative; the beam would not harm birds flying through the radiation beam. The degree of energy that they would receive would be comparable to solar radiation.

I think it is very important that we test this technology in its very, very fundamental stages at this point. While financially it may not be viable today, the technology demonstration would be very useful.

Mr. EHLERS. Well, I am a little skeptical, but I do not want to cook Mr. Rohrabacher's goose, so I yield back, Mr. Chairman.

Chairman SENSENBRENNER. For what purpose does the gentleman from Tennessee seek recognition?

Mr. GORDON. To strike the last word.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. GORDON. Just two quick points. One, I want to compliment Mr. Udall for being the conscience of this Committee on renewable energy, and I hope that he will continue to raise these points with us. I think that he points out that we need to be doing more in this area, not less.

And secondly, let me say that having worked with Chairman Rohrabacher for some time now, I know this is a real passion of his. This is not a parochial issue. This is something he spent a lot of time reviewing, and I would concur with the amendment. I think that we should take another look. I do not know—I do not want to set up a perpetual endowment here, but we should take another look at this hopefully good technology. And if it is not successful, then we will let Scottie beam Dana back to California. But let us at least give it a try.

Chairman SENSENBRENNER. The question is on agreeing to the amendment of the gentleman from California, Mr. Rohrabacher.

Those in favor will signify by saying aye.

Opposed no.

The ayes appear to have it. The ayes have it, and the amendment is agreed to.

Amendment number three is by the gentleman from Minnesota, Mr. Gutknecht. For what purpose does the gentleman from Minnesota seek recognition?

Mr. GUTKNECHT. Mr. Chairman, to offer an amendment.

Chairman SENSENBRENNER. The clerk will report the amendment.

The CLERK. Amendment offered—amendment to H.R. 1655, offered by Mr. Gutknecht—

Chairman SENSENBRENNER. Without objection, the amendment is considered as read, and the gentleman from Minnesota is recognized for five minutes.

[The information follows:]

Page 14, line 12, insert “, of which \$2,500,000 for fiscal year 2000 and \$2,750,000 for fiscal year 2001 shall be for biodiesel fuel research and development” after “Research and Development”.

Mr. GUTKNECHT. Mr. Chairman, I hope I won't take the whole five minutes. But I do want to thank you and your staff and the Chair of the Subcommittee as well as their staff for working with us on this amendment for the Department of Energy to expand its research and development on biodiesel fuel.

This environmentally-friendly fuel is created from mixing soybean oil with diesel fuel, and if you have ever been behind a bus or a truck when they took off, you recognize the value of biodiesel, because by mixing a 20-percent blend of soybean oil with diesel fuel, we know that we can cut the exhaust emissions by about 40 percent and perhaps in some cases even more.

During the oil crisis of the 1970s, America imported less than 40 percent of its fuel. Today, we import nearly 60 percent of energy needs. I think it is time that we in this Congress start to look for ways—new and innovative ways—to reduce our dependence on foreign energy sources. And I believe that biodiesel fuel can help us do exactly that.

This biodiesel provision is a win-win-win scenario. It is a win for cleaner air. We win with more energy independence. And we win by providing markets for our soybean producers and good paying jobs in rural America.

As a matter of fact, in the April issue of “DOE This Month,” there is an article about two researchers who found a quicker way to turn waste french fry oil into a higher grade biodiesel. This improved process cuts down the amount of materials and the time needed to create biodiesel, making it cheaper to produce.

Reducing the cost of production is a major step in the path towards producing a viable alternative fuel. More research like this can lead to an abundant energy source that is friendlier to the environment than traditional petroleum-based fuels.

I ask each one of you to support this amendment to increase research on biodiesel.

Chairman SENSENBRENNER. Does the gentleman yield back the balance of this time?

Mr. GUTKNECHT. I yield back the balance of my time.

Chairman SENSENBRENNER. Further discussion on the amendment by the gentleman from Minnesota?

Mr. SMITH of Michigan. Mr. Chairman.

Chairman SENSENBRENNER. For what purpose does the gentleman from Michigan ask recognition?

Mr. SMITH of Michigan. Well, I would just say as far as the odor coming out of these diesel—

Chairman SENSENBRENNER. The gentleman is recognized for five minutes to talk about odor. [Laughter.]

Mr. SMITH of Michigan. There is some evidence that sunflower oil and safflower might smell better than the soybean oil, and I just pass that on for information.

Chairman SENSENBRENNER. Does the gentleman wish to use the remaining 4 minutes and 40 seconds?

Mr. SMITH of Michigan. No, I certainly would yield back the balance of my time.

Chairman SENSENBRENNER. Okay. Further discussion on the amendment by the gentleman from Minnesota?

Hearing none, all those in favor of agreeing to the amendment will signify by saying aye.

Opposed no.

The ayes appear to have it. The ayes have it, and amendment is agreed to.

The next amendment on the roster is one by the gentleman from Pennsylvania, Mr. Doyle. For what purpose does he seek recognition?

Mr. DOYLE. Mr. Chairman, I have an amendment at the desk.

Chairman SENSENBRENNER. The clerk will report the amendment.

The CLERK. Amendment to H.R. 1655, offered by Mr. Doyle—

Chairman SENSENBRENNER. Without objection, the amendment is considered as read, and the gentleman from Pennsylvania is recognized for five minutes.

[The information follows:]

Page 16, after line 8, insert the following new section:

**SEC. 4. GAS HYDRATE ENERGY AND SCIENTIFIC AND ENVIRONMENTAL RESEARCH AND DEVELOPMENT PROGRAM.**

(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary, acting through the Assistant Secretary for Fossil Energy, shall commence a program of gas hydrate energy and scientific and environmental research and development.

(b) GRANTS, CONTRACTS, COOPERATIVE AGREEMENTS, INTERAGENCY FUNDS TRANSFER AGREEMENTS, AND FIELD WORK PROPOSALS.—

(1) ASSISTANCE.—The Secretary, acting through the Assistant Secretary for Fossil Energy, may award grants or contracts to, or enter into cooperative agreements with, institutions of higher education and industrial enterprises to conduct energy and scientific and environmental research, development, and demonstration programs on gas hydrate.

(2) PEER REVIEW.—Funds made available under paragraph (1) for initiating contracts, grants, cooperative agreements, interagency funds transfer agreements, and field work proposals shall be made available based on a competitive selection process and a peer review of proposals. Exceptions shall be considered on a case-by-case basis, and reported by the Secretary, acting through the Assistant Secretary for Fossil Energy, to the Committee on Science of the House of Representatives and the Committee on Energy and Natural Resources of the Senate 30 days prior to any such award.

(c) CONSULTATION.—The Secretary, acting through the Assistant Secretary for Fossil Energy, may establish an advisory panel consisting of experts from industry, institutions of higher education, and other entities as the Secretary considers appropriate, to assist in developing recommendations and priorities for the gas hydrate research and development program carried out under subsection (a).

(d) LIMITATIONS.—

(1) ADMINISTRATIVE EXPENSES.—Not more than 5 percent of the amount made available to carry out this section for a fiscal year may be used by the Secretary, acting through the Assistant Secretary for Fossil Energy, for expenses associated with the administration of the program carried out under subsection (a).

(2) CONSTRUCTION COSTS.—None of the funds made available to carry out this section may be used for the construction of a new building or the acquisition, expansion, remodeling, or alteration of an existing building (including site grading and improvement and architect fees).

(e) DEFINITIONS.—For purposes of this section:

(1) CONTRACT.—The term “contract” means a procurement contract within the meaning of section 6303 of title 31, United States Code.

(2) COOPERATIVE AGREEMENT.—The term “cooperative agreement” means a cooperative agreement within the meaning of section 6305 of title 31, United States Code.

(3) GRANT.—The term “grant” means a grant awarded under a grant agreement, within the meaning of section 6304 of title 31, United States Code.

(4) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” means an institution of higher education, within the meaning of section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)).

(f) AUTHORIZATION OF APPROPRIATIONS.—Of the amounts authorized under section 3(c)(3), \$5,000,000 for fiscal year 2000 and \$7,500,000 for fiscal year 2001 shall be available for carrying out this section.

Redesignate subsequent sections accordingly.

Mr. DOYLE. Thank you, Mr. Chairman.

I have been pleased to work recently with my Chairman on the Energy and Environment Subcommittee, Ken Calvert, and Ranking Member Jerry Costello on bipartisan legislation defining a research program on gas hydrates.

Mr. Chairman, on May 12, the Energy and Environment Subcommittee marked up and reported out my bill on this issue, H.R. 1753 to the full Committee. I would like to commend it to you for your future consideration by the full Committee.

In a nutshell, gas hydrates are a clean burning fossil energy source located primarily on the ocean floor and in the Arctic permafrost in quantities that are more than double existing oil, gas, and coal reserves worldwide. The downside is significant and research will be required before we can successfully access this energy.

The amendment I am offering to H.R. 1655 today is a bipartisan consensus draft that follows on the progress we have made in subcommittee. This amendment will allow us to keep our options open as we move towards fuller consideration of H.R. 1655—whether we wish to append it to a gas hydrates research program or not.

Once again, I am pleased to be able to work with my friends on both sides of the aisle on this issue. And I urge that all members to give this issue the careful consideration it deserves. With that, Mr. Chairman, I will yield back my time.

Chairman SENSENBRENNER. Will the gentleman yield?

Mr. DOYLE. Sure. I will certainly yield.

Chairman SENSENBRENNER. Let me say I think that this makes a constructive addition to this bill, and also that it is done without prejudice to the Committee marking up H.R. 1753 and sending it to the Floor. I think that we can put the bill the gentleman has introduced on the suspension calendar and get that over to the Senate a lot quicker than this one.

Mr. DOYLE. Thank you, Mr. Chairman. I yield back.

Chairman SENSENBRENNER. Further discussion on the amendment by the gentleman from Pennsylvania, Mr. Doyle?

Hearng none, all those in favor of agreeing to the amendment will signify by saying aye.

Opposed no.

The ayes appear to have it. The ayes have it, and the amendment is agreed to.

the next amendment on the roster is by the gentleman from Colorado, Mr. Udall. For what purpose does he seek recognition?

Mr. UDALL. Mr. Chairman, I have an amendment at the desk.

Chairman SENSENBRENNER. The clerk will report the amendment.

The CLERK. Amendment to H.R.—

Mr. UDALL. Mr. Chairman, I ask unanimous consent that the amendment be considered as read.

Chairman SENSENBRENNER. Without objection, and is this the same amendment as the one that appears in the packets that have been distributed or is it a different version?

[The information follows:]

Page 2, line 18, strike "\$546,178,000" and insert "\$596,078,000".  
 Page 2, line 18, strike "\$566,744,000" and insert "\$618,761,630".  
 Page 2, line 21, strike "\$316,624,000" and insert "\$366,524,000".  
 Page 2, line 22, strike "\$325,321,000" and insert "\$377,339,630".  
 Page 2, line 24, strike "\$3,708,000" and insert "\$5,500,000".  
 Page 2, line 25, strike "\$3,819,000" and insert "\$5,665,000".  
 Page 3, line 1, strike "\$83,345,000" and insert "\$93,309,000".  
 Page 3, line 2, strike "\$85,845,000" and insert "\$96,108,270".  
 Page 3, line 4, strike "\$17,510,000" and insert "\$18,850,000".  
 Page 3, line 5, strike "\$18,035,000" and insert "\$19,415,500".  
 Page 3, line 7, strike "\$75,396,000" and insert "\$92,391,000".  
 Page 3, line 8, strike "\$77,658,000" and insert "\$95,162,730".  
 Page 3, line 10, strike "\$35,814,000" and insert "\$45,600,000".  
 Page 3, line 11, strike "\$36,889,000" and insert "\$46,968,000".  
 Page 3, line 13, strike "\$1,500,000" and insert "\$4,000,000".  
 Page 3, line 14, strike "\$1,500,000" and insert "\$4,120,000".  
 Page 3, line 19, strike "\$1,100,000" and insert "\$3,900,000".  
 Page 3, line 20, strike "\$1,100,000" and insert "\$4,017,000".  
 Page 4, line 1, strike "\$3,348,000" and insert "\$7,000,000".  
 Page 4, line 2, strike "\$3,448,000" and insert "\$7,210,000".  
 Page 4, line 7, strike "\$18,100,000" and insert "\$19,171,000".  
 Page 4, line 8, strike "\$18,100,000" and insert "\$19,746,130".  
 Page 14, line 1, strike "\$503,383,000" and insert "\$589,217,000".  
 Page 14, line 2, strike "\$540,797,000" and insert "\$631,143,540".  
 Page 14, line 4, strike "\$204,935,000" and insert "\$246,999,000".  
 Page 14, line 5, strike "\$210,845,000" and insert "\$254,409,000".  
 Page 14, line 7, strike "\$129,714,000" and insert "\$168,080,000".  
 Page 14, line 8, strike "\$133,606,000" and insert "\$173,122,400".  
 Page 14, line 13, strike "\$5,196,000" and insert "\$7,000,000".  
 Page 14, line 14, strike "\$5,352,000" and insert "\$7,210,000".  
 Page 14, line 19, strike "\$7,925,000" and insert "\$9,820,000".  
 Page 14, line 20, strike "\$7,925,000" and insert "\$10,114,600".  
 Page 14, line 22, strike "\$155,131,000" and insert "\$171,000,000".  
 Page 14, line 23, strike "\$159,534,000" and insert "\$176,130,000".  
 Page 15, line 1, strike "\$59,180,000" and insert "\$74,000,000".  
 Page 15, line 2, strike "\$60,955,000" and insert "\$76,220,000".  
 Page 15, line 7, strike "\$8,351,000" and insert "\$9,400,000".  
 Page 15, line 8, strike "\$8,351,000" and insert "\$9,682,000".  
 Page 15, line 10, strike "\$83,185,000" and insert "\$103,418,000".  
 Page 15, line 11, strike "\$85,286,000" and insert "\$106,520,540".  
 Page 15, line 14, strike "\$55,870,000" and insert "\$62,018,000".  
 Page 15, line 15, strike "\$57,546,000" and insert "\$63,878,540".  
 Page 15, line 17, strike "\$14,144,000" and insert "\$41,400,000".  
 Page 15, line 18, strike "\$14,568,000" and insert "\$42,642,000".  
 Page 15, line 23, strike "\$35,132,000" and insert "\$42,800,000".  
 Page 15, line 24, strike "\$35,132,000" and insert "\$44,084,000".

Mr. UDALL. I believe it is the same amendment, Mr. Chairman.

Chairman SENSENBRENNER. Okay. The gentleman is recognized for—

Mr. UDALL. There's no. There's no—it is a—it is a different—

Chairman SENSENBRENNER. Okay, if it is a different version, would the gentleman please explain the bill differences. And the gentleman is recognized for five minutes.

Mr. UDALL. Thank you, Mr. Chairman. This amendment would authorize Fiscal Year 2000 funding for the Department of Energy's—Energy Efficiency and Renewable Energy programs at the

level of the President's request, and it would increase these numbers by three percent in Fiscal Year 2001.

Renewable energy programs allow America to use its scientific and technological expertise in developing alternative energy sources, such as wind, solar, biomass power, and geothermal energy. These diverse energy resources can decrease our ever-growing dependency on imported oil and reduce environmental impacts of traditional fossil fuels while expanding our economy through technological advances.

The DOE's Renewable Energy and Energy Efficiency programs are a major component of the Nation's environmental initiatives. By reducing air pollution and other environmental impacts from energy production and use, they also constitute the single largest and most effective Federal pollution prevention program.

Furthermore, investments in sustainable energy technologies meet multiple other public policy objectives. Our dependence on imported oil has increased to record levels over the past 25 years. These programs are helping to reduce our reliance on oil imports, thereby strengthening our national security and also creating hundreds of new domestic businesses supporting thousands of jobs and opening new international markets.

Past Federal support for sustainable energy programs has been key to the rapid growth of emerging renewable technologies. Solar, wind, geothermal, and biomass technologies have together more than tripled their contribution to our nation's energy mix over the past 20 years. Including hydropower, renewables now account for 10 percent of total domestic energy production and approximately 13 percent of domestic electricity generation.

While these technologies have become increasingly cost competitive, the pace of their penetration into the market will be determined largely by Government support for future research and development, as well as by assistance in catalyzing public-private partnerships eventually leading to full commercialization.

Without this amendment, this bill would undermine our progress in this area. And let me give you a few reasons why.

As it stands, the bill would reduce funding for the Solar Buildings program. One of the projects that would suffer involves a consortium of companies and universities that is developing a low-cost polymer solar water heater that could be installed for a thousand dollars and that would reduce the cost of energy by 50 percent relative to today's systems. Cuts to this program would affect companies and universities in Arizona, California, Pennsylvania, Florida, and Minnesota and Wisconsin.

H.R. 1655, as it now reads, would reduce funding for Photovoltaic or PV Energy Systems. One of the largest domestic markets for PV system is the residential and commercial rooftop application. The bill's cuts would virtually eliminate the building integrated product development and deployment activities, adversely affecting companies—California, Maryland, Virginia, Michigan, Massachusetts, and Washington.

The bill also would reduce funding for Biopower and Biofuels. These cuts would reduce the number of DOE-USDA biomass feedstock development centers which are being planned for the Pacific Northwest, Southeast, the Midwest Plain States, and Northeast

Lake States, and reduce R&D that could lower the cost of producing ethanol.

The ethanol industry currently provides 40,000 jobs or a billion dollars in household income.

Not only are these programs valuable to our national security and economy, but they also directly benefit each of our districts. The world's largest solar manufacturer is located in Maryland's sixth district. The largest manufacturer of solar roofing shingles and electric car batteries is based in Michigan. And a new wind turbine manufacturing plant has been built in Champaign, Illinois.

Rebuild America community partnerships reduce energy use in cities in California, Washington, and Utah, among other States. In my State of Colorado, the National Renewable Energy Lab is the Nation's leading center for renewable energy research.

I could go on at length, but let me just sum up. Mr. Chairman, the Department of Energy's clean energy programs are vital to our nation's interests, helping provide strategies and tools to address the environmental challenges and energy production challenges we will face in the next century.

Handcuffing these programs at 1999 levels for the next two years does not give us sufficient flexibility to utilize the potential benefits these programs could provide. We should do better, and I urge your support for my amendment.

Chairman SENSENBRENNER. The gentleman's time has expired. I understand the gentlewoman from California, Ms. Woolsey, has an amendment to the Udall amendment. And let us get that on the table first. So, for what purpose does the gentlewoman from California seek recognition?

Ms. WOOLSEY. Mr. Chairman, I have an amendment to the amendment, and ask to strike the last word—

Chairman SENSENBRENNER. The clerk will report the amendment to the amendment.

The CLERK. Amendment offered by Ms. Woolsey to the amendment offered by Mr. Udall of Colorado—

Chairman SENSENBRENNER. Without objection, the amendment is considered as read and the gentlewoman from California is recognized for five minutes.

[The information follows:]

Page 1, in the first item relating to page 2, line 18, in lieu of the matter proposed to be inserted, insert the following: "\$600,078,000".

Page 1, in the second item relating to page 2, line 18, in lieu of the matter proposed to be inserted, insert the following: "\$623,376,630".

Page 1, in the item relating to page 2, line 21, in lieu of the matter proposed to be inserted, insert the following: "\$370,524,000".

Page 1, in the item relating to page 2, line 22, in lieu of the matter proposed to be inserted, insert the following: "\$381,954,630".

Page 2, after the item relating to page 3, line 20, insert the following new items:

Page 3, line 22, strike "\$29,500,000" and insert "\$33,500,000".

Page 3, line 23, strike "\$30,385,000" and insert "\$35,000,000".

Ms. WOOLSEY. Thank you, Mr. Chairman. I fully support Mr. Udall's amendment, but I would like to add something to that because, Mr. Chairman, about 6 percent of the energy produced in my home State of California is produced by geothermal energy. In fact, geothermal heat produces energy for businesses, homes, schools in 17 States in this country.

Geothermal is a technology with significant benefits and potential. Geothermal energy can provide a reliable alternative energy capable of supplying significant world energy needs, and we must support it.

In June of 1998, the Department of Energy released a new strategic plan for geothermal energy, and this plan included new technology for advanced production of geothermal systems. However, over the past few years, we have had declining funding for geothermal. The budget request for Fiscal Year 2000 leaves geothermal well short of the Department of Energy's strategic plan.

The President's Committee of Advisors on Science and Technology recommended in its 1997 report that geothermal be funded between \$50 million and \$60 million annually. And in this budget, we have a request for around \$30 million for the two years—Fiscal Year 2000 and Fiscal Year 2001. And because of this, I want to offer an amendment to increase the geothermal program by \$4 million each year in 2000 and 2001. This increased funding would help implement the strategic plan for enhanced geothermal technology. That does not even come close to what was requested, the \$50 million to \$60 million, Mr. Chairman.

Enhanced geothermal could have great benefits if adequately funded. We could triple domestic geothermal electric production and serve the needs of 18,000,000 people in the United States. Geothermal could also lead the way in U.S. renewable energy exports by installing at least 10,000 megawatts of geothermal energy in developing countries.

I urge the members of this Committee to support the Udall amendment and to support my amendment to the amendment. Thank you very much, Mr. Chairman.

Chairman SENSENBRENNER. The gentlewoman's time has expired. For what purpose does the gentlewoman from California seek recognition?

Mr. CALVERT. Mr. Chairman, I oppose the amendment.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. CALVERT. Mr. Chairman, I understand the intent of the gentleman from Colorado and the gentlelady from California. However, 1655 already approves spending increases for Solar and Renewable Energy Technologies. Including the already authorized Hydrogen Research Program and related Office of Science Programs, the bill recommends \$401.9 million fiscal year 2000 for these programs—an increase of \$26.9 million, or 7.1 percent above the amount appropriated for Fiscal Year 1999—and recommends \$418.1 million for Fiscal Year 2001, an increase of \$16.2 million, or 4 percent above the amount recommended for Fiscal Year 2000. These amounts increase Solar and Renewable Energy Technologies well above the three-percent levels committed to in the Committee's views and estimates.

H.R. 1655 also maintains a strong commitment to energy efficiency, which not only saves energy but also benefits the environment. The bill recommends \$490.2 million Fiscal Year 2000 for energy conservation and R&D programs, an increase of \$24.5 million or 5.3 percent above the amount appropriated in Fiscal Year 1999; and recommends \$527.6 million for Fiscal Year 2001, an increase



of \$37.4 million, or 7.6 percent above the amount recommended for Fiscal Year 2000.

Also included is \$25 million in Fiscal Year 2000 and \$50 million in Fiscal Year 2001 for energy efficiency science initiative for grants to be competitively awarded and subject to peer review for research relating to energy efficiency. These amounts increase energy conservation R&D well above the three-percent levels committed to in the Committee's view and estimates.

Furthermore, Mr. Chairman, the funding levels in this bill and for these programs are already above the levels that can be reasonably accommodated by the Appropriations Committee. And further increases simply cannot be tolerated. The Committee has to have fiscal discipline in order to be taken seriously by the Appropriations Committee, and unfortunately we just do not have the money to stay within the budget caps, even though these are worthwhile goals. And so, Mr. Chairman, I opposed this amendment and urge my members—

Ms. WOOLSEY. Well, would the gentleman yield?

Mr CALVERT. Be happy to yield.

Ms. WOOLSEY. Thank you. Thank you. And those were a lot of big numbers, and I understand. And we do have to be fiscally prudent here. But when we have energies, renewable energies like geothermal energy that we are not even coming close to what is needed to get what we need out of this. I would—

Mr CALVERT. If I could—

Ms. WOOLSEY. I would like to suggest that maybe we could carve out a couple of these and do the best we can for those energies that are proving their point.

Mr CALVERT. Reclaiming my time from the gentlelady, I can understand her desire to increase geothermal. As a matter of fact, in my area in southern California, a large part of the geothermal that you are speaking of is produced in the Imperial County area in the southern part of California. We have spent a tremendous amount of resources over the years, actually since the early 1970s, to increase productivity of geothermal with some success, and I believe that this bill will continue that commitment toward research. I believe this is a sufficient amount of money to continue to have good research in geothermal. And our production levels will show that in geothermal power in the future.

With that, Mr. Chairman, I yield back the balance of my time.

Chairman SENSENBRENNER. Further discussion on the Woolsey amendment?

Mr. HALL. Mr. Chairman. Mr. Chairman.

Chairman SENSENBRENNER. The gentleman from Texas, Mr. Hall.

Mr. HALL. Mr. Chairman, I—

Chairman SENSENBRENNER. Is recognized for five minutes.

Mr. HALL. Yes, I am—I rise in support of the amendment. And to the gentleman from California, who makes a lot of sense in his presentation, I would only point out that this is not an appropriations bill. It does not appropriate, it simply is an authorization bill. And if it turns out that the appropriators do not end up with enough additional funds, then clearly these programs would—might all have to be cut. Now, I do not know about the gentlelady

from California, because I have not seen her amendment. I have just now been handed some information on it that I have not had a chance to read.

But all this amendment does is to restore the President's request for these programs, and I think the request for solar and renewables and conservation programs for Fiscal Year 2000 is, as you said, as you stated, just over a billion dollars. And this bill authorizes only \$820 million, which is a difference of \$180 million. By contrast, the nuclear energy—and I have no quarrel with this—but it is up \$3.4 million from the President's request. Fossil Energy, which I certainly have no quarrel with, is up \$37.5 million from the President's request, and almost all the science programs are at or above the President's request.

I have a hard time seeing why solar and renewables and conservation programs be the only ones for which we do not have enough money if we have enough money; and if we do not have enough money, they do not—

Mr. CALVERT. Would the gentleman yield?

Mr. HALL. Sure, I will be glad to yield.

Mr. CALVERT. Actually, we increased the dollars going into solar and renewables significantly from last year's budget, as the gentleman knows. And, as a matter of fact, we have a tremendous commitment to those technologies. I support them. Unfortunately, based upon the budget realities, we cannot meet the President's desires in every category.

Mr. HALL. Well, I must say I am having a little hard time supporting the increase because it is a substantial increase, but I see no problem in increasing the appropriations while we do not authorize them if something happens and they stop the war in Kosovo, and we wind up actually having a surplus. We may want to support these requests here. If not, we are under no bind, under no direction from this Committee or from the Congress to do it. With that, I yield back my time, or I yield back to the gentleman—

Mr. CALVERT. If the gentleman would yield. I believe Mr. Cook is going to have an amendment that you might want to entertain that will entertain offsets to this. I still believe that the—that this position is a good one. We have increased the renewables a significant amount from last year's budget. And I would urge that this amendment be defeated. I thank the gentleman.

Mr. HALL. Yes—requiring—reclaiming my time, I think Mr. Cook's amendment is only going to address the geothermal. I do not think it addresses the other. I may be wrong, but I may be interested. Mr. Cook's known for having good amendments.

Mr. COSTELLO. Mr. Chairman.

Chairman SENSENBRENNER. Okay, the gentleman's time has expired.

Ms. WOOLSEY. Mr. Chairman.

Chairman SENSENBRENNER. Who seeks recognition?

Mr. COSTELLO. Mr. Chairman.

Chairman SENSENBRENNER. Okay, the gentleman from Illinois, Mr. Costello, is recognized for five minutes.

Mr. COSTELLO. Mr. Chairman, I support this amendment. This amendment restores funds for solar and renewable energy pro-

grams, as well as the DOE's Energy Efficiency programs. The development of renewable energy sources and increased reliance on energy efficiency will reduce the U.S. reliance on imported oil.

My friend from Texas, Mr. Hall, has pointed out that the mark in this bill is, in fact, \$180 million below the President's request, and, as my friend the Chairman of the Subcommittee, Mr. Calvert, pointed out, there was a significant increase from last year to this year. But it is still \$180 million less than the President's request and for that reason and the reasons that I have given, I am supportive of the amendment. I yield the balance of my time to the gentlewoman from California, Mrs. Woolsey.

Ms. WOOLSEY. Thank you, Mr. Costello. I would like to remind this Committee we are an authorizing committee like Congressman Hall said. And I would like to remind you that if we here on this committee do not consider it our responsibility to champion renewable energies, then nobody else in this Congress is going to. That is our job. And we need to be symbolically on paper pushing the appropriators to invest in a balanced energy production. I mean, we cannot have it all nuclear and not—and all fossil fuels. We have to, on this Committee, make the stand and symbolically state that renewable energies will be the future of this nation.

Mr. CALVERT. Will the gentlelady yield?

Ms. WOOLSEY. Yes.

Mr. CALVERT. Well, I guess it is the—gentleman would yield?

Ms. WOOLSEY. Yes.

Mr. CALVERT. I believe authorizers have a responsibility also to work within the budget caps and the allocations that are given to us by the Budget Committee. And I would make every attempt to do that, at the same time meet all of the members' projects and goals. And I think the gentleman from Illinois would agree: we have a limited amount of dollars to deal with. We certainly cannot make everybody happy, but we do everything we can to do so.

Mr. COSTELLO. Reclaiming my time—reclaiming my time, I would yield the balance to Ms. Woolsey.

Ms. WOOLSEY. Yes, thank you. And the gentleman is correct: we have limited funds. Let us invest those funds in renewable energies that are not limited instead of fossil fuels and other limited energy sources. And I will yield back.

Ms. RIVERS. Mr. Chair?

Chairman SENSENBRENNER. The gentlewoman yields back—the gentleman yields back the balance of this time. For what purpose does the gentleman from California, Mr. Rohrabacher, seek recognition.

Mr. ROHRABACHER. To strike the last word.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. ROHRABACHER. This is just a suggestion, and I agree with Mr. Udall's motives here, because obviously he is concerned, and I as well am concerned, as my amendment suggested a few moments ago, that the price of energy will go up in the future. And Mr. Udall is trying to make sure America and the world is prepared for that when we start finding that our oil resources become depleted; and we do not want to, at that point, not have an alternative to

go to because we will have to reduce all sorts of other things that pertain to our quality of life at that time just to provide the energy.

So, your motive is very good here, Mr. Udall. My only suggestion is this: that when we have amendments like this where we are trying to focus more funds in a given area in renewables, there are ways that we can find other things in the budget rather than breaking the budget caps and just ignoring budget caps to beef those areas up. For example, when I was chairman of the Energy and Environment Subcommittee, I was faced with this problem too, and I just took massive cuts out of fusion energy research. And, frankly, the fusion energy program, from what I have seen, has not justified the amount of money that we are putting into it, because we have not had much progress with fusion energy. And my recommendation—I will reluctantly have to vote against the gentleman's amendment—but just a suggestion in the future if you would come forward and say, "Hey, this money is not showing the right kind of results when we pump it into fusion energy. Let us put it into these renewables." I would be very inclined to support an amendment like that rather than just an amendment that just eliminated the budget cuts.

Mr. SMITH of Michigan. Would the gentleman yield? Would the gentleman yield?

Mr. ROHRABACHER. Yes, I certainly will.

Chairman SENSENBRENNER. The time belongs to the gentleman from California.

Mr. SMITH of Michigan. Mr. Rohrabacher.

Mr. ROHRABACHER. Yes, I would. Sure.

Mr. SMITH of Michigan. Thank you. The question—part of the question is do we have a responsibility in the authorizing committee to stay within the caps or can we cavalierly say it is okay if we authorize more because really it is the appropriators that are busting the caps. And again, I call to this Committee's attention synonymous with busting the caps is using the Social Security surpluses to pay for these expenditures.

And so, I strongly feel that Mr. Rohrabacher, and his suggestion that if you want to come up with a different set of priorities let us offset those and decide where reductions should be, but let us not simply say that we can authorize more because the ultimate decision is with the appropriators. I think it is very important that we be cognizant and conscious of the caps that we have set, number one; and number two, that we are simply authorizing using Social Security surpluses to—for these kind of additional government surpluses, and I think it is very, very important that we be conscious of those applications to Social Security. And I yield back the balance of my time.

Ms. WOOLSEY. Mr. Chairman. Mr. Chairman.

Mr. ROHRABACHER. Reclaiming my time—just to say that we have put money into some of these nuclear programs. And I imagine Mr. Udall and I totally agree that that is not the direction to go in terms of spending limited dollars. There is still money in this bill that does still continue to fund fusion research, and perhaps we should go to these renewables by taking money from that pool of money rather than just busting the caps and taking it from the pool of money that we were hoping would go to Social Security.

Ms. WOOLSEY. Mr. Chairman.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Chairman.

Mr. ROHRABACHER. I yield back the balance of my time.

Chairman SENSENBRENNER. The gentlewoman from Texas, Ms. Johnson, is recognized for five minutes.

Ms. EDDIE BERNICE JOHNSON of Texas. Thank you, Mr. Chairman. I fully understand and appreciate the statements on the budget caps. I just do not want us to overlook the fact that renewable energy and energy efficiency is really big business and expands our economy through technological advances, domestic job creation, and export markets. The worldwide market for energy supply and construction is several hundred billion dollars over the next 30 years. We currently lead the world in energy technologies and do not want to give up that market. Past Federal support for sustainable energy programs has been key to the rapid growth of emerging renewables technologies. Including hydropower renewables now account for 10 percent of the total domestic energy production and approximately 13 percent of the domestic electricity generation. Just six energy efficient building technologies that were developed with very little Department of Energy funding has saved consumers over \$30 billion. While these technologies have become increasingly cost competitive, the pace of their penetration into the market will be determined largely by Government support for future research and development, as well as by assistance in catalyzing public-private partnerships leading to full commercialization.

I am not for spending Social Security money before Social Security is fixed. And I know it is a nice cliché to say that it is going to be taken from there, but I really do feel that we need to give strong consideration in this area, because as we begin to narrow our minds into the thinking and learning along these lines of energy research, we also inhibit and hurt our future. And want to have us figure that as we make our statements against this amendment. I happen to believe that it is good investment, and I fully support the fact that we are authorizing. Dollars might show up since we are in a surplus market. I really feel strongly that we should continue to support this research.

Mr. HALL. Would the gentlelady yield?

Ms. EDDIE BERNICE JOHNSON of Texas. I will yield to Mr. Hall.

Mr. HALL. Yes, I think that you are certainly on track and when you mention pledging the Social Security Fund. The reason I have supported pledging the Social Security—uplifting it and supporting it and girding it with the surplus—is that I do not believe we have a surplus. And I would rather support it with the surplus we do not have as to spend the surplus we do not have and then initiate another long list of deficit spending.

The last several presidents have used the Social Security surplus to show that we were not broke and then they deficit spent. And we are just now getting over that. I think there is a corollary between that and this gentleman's amendment. We are asking for money that may not be spent, but if the money is there, and we have the surplus, and we think these are deserving objects and subjects to support. That is this authorization committee's duty to do that—to do it sensible. To speak of fossil fuels, I do not make any apologies for fossil fuels. You have used fossil fuels to win all

the wars of this last century, and there is not any lack or loss of oil. There is not any dearth of oil and gas. There is just a lack of support for it. The only energy policy we need is some incentive to look for it, and some reward for finding it. And the Government has taken that away. So, I just think that this bill, this amendment, is a good amendment. It does not cost us anything. We are not spending any money right now. We are saying in the event it is there, times go well, the surplus appears more real than questionable that we take another look at it. I urge the adoption of this amendment.

Ms. WOOLSEY. Would the gentleman yield?

Mr. HALL. I do yield.

Ms. WOOLSEY. Thank you very much.

Chairman SENSENBRENNER. The time belongs to the gentlewoman from Texas, Ms. Johnson.

Ms. WOOLSEY. Ms. Johnson.

Ms. EDDIE BERNICE JOHNSON of Texas. I yield.

Ms. WOOLSEY. Thank you. I want to repeat again this is not about busting the budget caps. This is about making a statement for renewable energy. And to tie the two together is, I believe, is irresponsible for us on this committee not to be going forward and making that statement in support of renewable energy, geothermal being part of that, with my amendment to the amendment. So, I will yield back.

Ms. RIVERS. Mr. Chairman.

Chairman SENSENBRENNER. The gentlewoman's time has expired. For what purpose the gentlewoman from Michigan, Ms. Rivers, seek recognition.

Ms. RIVERS. I move to strike the last word.

Chairman SENSENBRENNER. The gentlewoman is recognized for five minutes.

Ms. RIVERS. I am in support of the amendment and the amendment to the amendment, but I would like to speak first to the budgetary implications that have been raised here. As a member of the Budget Committee, I am somewhat mystified by the argument that the budget caps apply in an authorization setting, particularly since the underlying bills are not within the guidelines set by the Budget Committee. So the idea that we have somehow created a bright line that does not match the President's budget, but also does not match the Budget Committee's budget—and we are all obligated to hew to that is a very interesting argument. Every time I hear the question of offsets, I say, against what.

What we have is we have the Chairman's opinion, his best initial assessment of what is needed to run the DOE programs. We have not hewed to the Budget Committee numbers for these functions. There is absolutely no binding number that exists to cap us to certain overall spending levels. And the argument can be made well, if we exceed our spending levels as determined or as if we follow the Budget Committee, the underlying bill's already due, by \$525 million. So people who wish to argue the piety of not spending Social Security money, if that is the argument you want to make, have to vote against all of these bills, because, in fact, they exceed the budget caps.

Now, if you understand, and I believe it is correct to understand, that the budget caps do not bind authorizing committees, then we can go along and look at these things. But to argue that budget caps apply to amendments, but not to the underlying bills, is really, really specious.

Mr. CALVERT. Will the gentlelady yield?

Ms. RIVERS. I would like to—let me finish my comments, and then I would be happy to yield.

It is important to point out that these do not come to the President's numbers, but they do not go to the Budget Committee numbers either.

We also have a situation where the Chairman has pulled out, has backed out some programs, that we are going to address later. We do not know for how much. We do not know when. So the idea that we have a loose enough process to allow for programs to be backed out, to be addressed later at a funding level unknown to us, but that is impossible within these procedures to consider other amendments, just does not make sense. We are now hewing to a tight, controlled procedure. What you are essentially doing is arguing that fiscal piety should limit the minority's ability to make amendments, but I should not limit any of the activities of the majority. And that makes no sense. The bills that we have looked at already—NOAA was at the President's numbers. The NASA bill was above the President's numbers. We did not seem concerned about that. We did not seem concerned that we were not sticking to some fundamental pre-approved number. And the argument that there is such a number is not true.

What we are using is the Chairman's best opinion, and that is fine. But let us not pretend that is written in stone somewhere, and we have a legal obligation to follow it.

And who asked me—someone asked me to yield.

Mr. HALL. The gentlelady.

Ms. RIVERS. Mr. Hall. I will yield to Mr. Hall. If you do not want to use the Social Security corollary, we could even use the corollary of our appointment of Academy nominees. You know, we appoint those in addition that are alternates, and we are not saying to do away with the ones that we appointed. We are saying if an opening shows, use one of our alternates. We—shove this into the appropriation—to the authorization as we appropriate it. And if we do not appropriate it, they cannot authorize it. We do not—I think it is a win-win situation. I agree with the lady and I urge the adoption of this amendment because it does not cost us anything now.

Ms. RIVERS. Okay. I yield back the balance of my time.

Chairman SENSENBRENNER. The gentleman from Michigan, Mr. Ehlers.

Mr. EHLERS. Thank you, Mr. Chairman.

Chairman SENSENBRENNER. You are recognized for five minutes.

Mr. EHLERS. I move to strike the last word. I am in great sympathy with the motion and the intent of the motion, and I will get to that in a minute. But I also want to address the fiscal part and explain why I will not be voting for the amendment.

The authorization process in the Congress is very important, and I think we have to view it as something of great importance. We also have to recognize two items here: first is that this Committee

has adopted views and estimates, and we are trying to work within the guidelines adopted in the views and estimates. Secondly, this Committee has to maintain credibility with the appropriators. If that were not, if neither of those were true, we could simply authorize double the President's budget, or double what the Budget Committee recommended, because we are, in fact, just setting the maximum amount appropriators could spend. But then we would lose any credibility with the appropriators in terms of what we are supposed to be doing here, and that is setting priorities within the budget.

And I believe that through our process, we are maintaining credibility with the appropriators. We are establishing priorities. And I believe that the appropriators will listen to the Committee, as they did last year, simply because we worked very hard to make the tough decisions and share those tough decisions with them rather than simply doubling everything and letting them make tough decisions.

Ms. RIVERS. Will the gentleman yield?

Mr. EHLERS. So much—no, I will not yield. I have quite a bit more to say.

And for that reason, I won't be voting for this because there is no offset included in the amendment. And I think, noble as the amendment might be, I think we should offset.

Now, let me explain why I sympathize with the intent, and I think this is a very important. It is an issue I have raised over the past several years. I believe we should allocate more money to this particular part of the Department of Energy budget. I also could say that I wish they used it more efficiently and better. But that is a separate issue.

But let me point out, I don't like the terminology that has been used by the Department, that has been used here when we talk about renewals and conservation. I think it is much better to use more accurate terms. Instead of talking about conservation, we should talk about energy efficiency, because energy efficiency is really our goal. Conservation simply says we're going to try to save. Energy efficiency is a more proactive approach in which we look at every process we use in our society and say, "Can we make it more efficient?" We do that in all of our economic processes. We have failed to do it in our energy processes to a sufficient extent.

Secondly, the term "renewals" implies that somehow all of this is being renewed. I think it's much better to use a fiscal analogy here and recognize that we have income sources of energy, and we have savings sources of energy. Income, for example, is solar energy, which is continually flowing into our Earth's system. Savings would be fossil fuels, which are the accumulation over many, many years of the solar energy that we have received.

Now, just as in a fiscal sense, we cannot spend our savings forever without going broke, and we must depend on our income instead. I think we should do the same with energy. We should get away from our dependence on burning up our savings and try to use our income as much as possible. That can be solar energy; it can be other forms of energy. Nuclear and geothermal are somewhere in between, because these are savings resources, but they



are very, very long-term, and we don't have to be quite as concerned about using them.

But I think the issue here is trying to switch from using our savings to using our income and switching from conserving to energy efficiency, and if we place the emphasis on that and say that's what we're going to do; try to reformulate the program in the Department of Energy and point them in that direction, I think we will be much better off. This is something that I hope we can continue to work on through the conference process, through the appropriations process, and take a earlier and fresher look at it next year.

Mr. Chairman, I yield back the balance of my time.

Mr. UDALL. Mr. Chairman. Mr. Chairman. Mr. Chairman.

Chairman SENSENBRENNER. The gentleman from Tennessee, Mr. Gordon, is recognized for five minutes.

Mr. GORDON. Strike the last word. Mr. Chairman, there's been a lot of discussion about dollars and balance sheets and budgets. I want to compliment Ms. Rivers on, really, a splendid explanation of how these specific numbers really are met, and I want to bring up another, sort of, balance sheet area, and that is the fact that right now and over the past several years, we have spent billions of dollars in the Mid East, and we've spent these billions of dollars for a variety of good reasons. But let's not play games, the fact of the matter is we're spending that money, to a great extent, to keep a stable environment so that we can have a supply of oil. And as this country increases its dependency on oil from overseas, we're spending billions of dollars more. So, if we're going to get out the balance sheet, it would seem to me that it would be a good investment to spend a few million dollars more on renewable energies in this country, so that we're less dependent on foreign resources, and we can spend less billions of dollars there.

With that, I'll yield the rest of my time to Mr. Udall.

Mr. UDALL. I thank the gentleman from Tennessee. I wanted to make a couple of points. First, I want to express my support for Congresswoman Woolsey's amendment. I think it's an important addition to what we are trying to do here.

I want to talk to the comments made about being fiscally responsible and the budget caps—I think a number of colleagues have brought this point up—but it's important to recognize that almost every other program in this bill is being funded at or above the President's request, and if you really look at it, only the Spallation Neutron Source, the solar, the renewable, and the conservation accounts are cut. So, the symbolism of what we're doing here, I think, if my amendment doesn't pass, is significant. We said that this Committee is on the cutting edge and supports renewable energy, but we're not going to do that in this important piece of legislation. I'd also point out that in my opening statement I talked about many of the things that we lose out on if we don't pass this amendment, and you have states across the country—California, Maryland, Virginia, Michigan, Massachusetts, Washington—the biofuels programs that really touch every area of the country. These programs are not going to be operating at the levels at which we feel that they should if we do not pass this amendment. So, I, again, renew my plea that this is important to send to the appropriators

that we're making a statement that this Committee is on the cutting edge.

I yield back the balance of my time.

Mr. BARTLETT. Mr. Chairman.

Chairman SENSENBRENNER. For what purpose does the gentleman from Maryland seek recognition?

Mr. BARTLETT. I move to strike the last word.

Chairman SENSENBRENNER. The gentleman's recognized for five minutes.

Mr. BARTLETT. Thank you. Mr. Chairman, I speak in strong support of where Mr. Udall wants to go. It's been mentioned that at the time of the Arab oil embargo, we imported some 40 percent of our oil. We now report almost 60 percent of our oil. The reason for that is that at about 1970, America had found and pumped half of all the oil that we had. Since 1970, I think, year by year, we have found less oil and pumped less oil than the year before. Just about now, the world oil supply has been half found and has been about half pumped. We will shortly be on the downside of pumping the world's oil.

What Mr. Udall asked us to do is certainly in our national economy interest. We cannot afford to be importing every-increasing amounts of energy, and, ultimately, it will be in our national security interest. We cannot be, from a national security viewpoint, dependent on other sources outside our country for most of our energy supply.

I'm on the horns of a dilemma, because, although I strongly support where Mr. Udall wants to go, I also am very concerned about being responsible and stay within the budget caps. If this bill represents simply a wish list, then my wish is to put increased amounts of money into these programs, but I do not want to make a statement that is fiscally irresponsible. I hope that Mr. Udall and the Chairman might come to my rescue and that the amendment might be withdrawn with the Chairman's agreement that we will look for additional funding for these in conference. If this cannot be done, then I will be forced to choose the lesser of two evils, which I believe for me will be voting for this amendment and treating this bill as a wish list, because it's my understanding it already exceeds the probable amount of money that will be there through the appropriators.

I would like not to have to be in this position, but I do want to speak strongly in support of where Mr. Udall wants to go. We have, in the past, and we are, at present, not committing sufficient resources to develop the alternative energy sources that we must develop as the world will increasingly find it more difficult to find and pump oil at present prices.

Mr. CALVERT. Will the gentleman yield?

Mr. BARTLETT. So, I speak in strong support of the amendment and hope that there may be a way out. Thank you.

Mr. CALVERT. Will the gentleman yield?

Mr. BARTLETT. I can yield; yes, sir.

Mr. CALVERT. I would be more than happy to work with any member on any offset on amounts of dollars on any amendment that may be proposed. There are as many different goals and objectives as we have members in this Committee, both Republicans and

Democrats. We have tried to meet those goals and objectives as best as we can. If there's an offset to this, I'd be more than happy to entertain that. Some of these offsets we may agree to, and some of us may not agree to, but I believe that we have a responsibility as authorities to set the dollar limit that we can spend. We have done that, and, for that reason, Mr. Chairman, I am opposed to this amendment, and I thank the gentleman for yielding.

Mr. NETHERCUTT. Mr. Chairman.

Chairman SENSENBRENNER. The gentleman from Washington, Mr. Nethercutt. For what purpose do you rise?

Mr. NETHERCUTT. I move to strike the last word.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. NETHERCUTT. Let me take 60 seconds simply to say that as a member of the Appropriations Committee, I don't want anybody to be under the illusion that we don't take, on the Appropriations Committee, what we do on the Authorizing Committee seriously. We don't have the luxury there of saying "Well, let's just go above the cap, because it was authorized." That isn't possible in this day and age and in this world of tight budget caps. The Appropriations Committee is where the rubber hits the road; we have to make it all fit.

So, to the extent that this is an issue of goodness or badness of the amendment, I think it's a laudable effort on the part of the gentleman from Colorado, but if he wants to proceed, my suggestion would be, to make it more palatable for the people on the Appropriations Committee to deal with this at the proper time, to do offsets. Make it all fit here so that—because it has to all fit together in the budget caps at the Appropriations Committee.

So, I appreciate what Mr. Ehlers and others have said about that, and while it may be a good amendment, I think it all has to be fiscally responsible and offset if it's going to be valid, because we don't have the luxury of just lifting caps—

Mr. GORDON. Will the gentleman yield?

Mr. NETHERCUTT. Yes, certainly.

Mr. GORDON. Since you mentioned the budget caps at the Appropriation level, could you tell us what those are?

Mr. NETHERCUTT. I don't know what they are. I couldn't tell you as I sit here right this moment.

Mr. GORDON. So, what are we trying to abide by?

Chairman SENSENBRENNER. Will the gentleman yield?

Mr. NETHERCUTT. Sure, I will yield.

Chairman SENSENBRENNER. For the information, the gentleman from Tennessee, the 302(b) budget cap for the Energy and Water Subcommittee is approximately \$2 billion below the Fiscal Year 1999 appropriated level. So, it is brutal.

Mr. NETHERCUTT. And let me take my time back and say that's the reality that we have to work with. The Appropriations Committee Chairman and Subcommittee Chairman are going crazy trying to fit all of what they want to put on a bill into that bill when it's \$2 billion less.

Mr. GORDON. Would the gentleman yield?

Mr. NETHERCUTT. Sure.

Mr. GORDON. Well, again, if we want to be fiscally responsible, as you suggest, we need to know what that magic figure is. So, could you tell us—and if you can't tell us what that figure is, then why should we not—

Mr. NETHERCUTT. Well, let me take my time back. My understanding is that it is—that this would be above the level, as the Chairman has said.

Chairman SENSENBRENNER. Will the gentleman from Washington yield?

Mr. NETHERCUTT. Sure.

Chairman SENSENBRENNER. The 302(b) cap that applies to the Energy and Water Subcommittee is for all of the programs that are under the jurisdiction of that Subcommittee. What we are talking about authorizing in this bill is a fraction of the programs that are under jurisdiction of the Energy and Water Subcommittee. For example, they have got all of the Army Corps of Engineers' reclamation projects and things like that. So, I will be the first to admit that where we are at is above probably what the appropriators will end up giving us.

So, we are being an advocate; we are setting priorities. With the increases that conform to the budget views and estimates that the majority of each party signed off on, I think we are being advocates, and certainly the amounts recommended, which are above the Fiscal Year 1999 appropriated levels of solar and renewable as well as energy efficiency, we're not being parsimonious on that. But there comes a point where we can go across the line and lose our credibility, and I think the gentleman from Michigan, Mr. Ehlers, is absolutely correct in that type of assessment.

And the reason I oppose this amendment is that I think it does cross the line. Certainly, we could make everybody happy in this town, except the appropriators, by giving everybody everything they wanted and then adding 10 percent, and that's what we did in the last decade, and when those bills got down to the Appropriations Committee that was run by the Democratic Party, it was met with laughter, and I don't think we want to make ourselves irrelevant and make ourselves be completely out of the loop.

And while I think the gentleman from Colorado has the best of intentions, the fact is that we don't have an unlimited pot of money to deal with, and the more we go above the views and estimates that we all signed off on, the less likely it's going to be that we're going to have our views listen to when it counts in the Appropriations Committee.

Ms. WOOLSEY. Will the gentleman yield?

Chairman SENSENBRENNER. The time belongs to the gentleman from Washington.

Mr. NETHERCUTT. I'll yield.

Ms. WOOLSEY. Thank you very much. That's the point, Mr. Chairman. We are the authorizers. The appropriators cannot spend more, even if they wanted to, than we authorized, and why when the caps—they can spend less, absolutely—when the caps have already been busted, why would we use renewable energies as our example of where we're going to be fiscally conservative?

Chairman SENSENBRENNER. The gentleman's time has expired.

Mr. NETHERCUTT. I yield back whatever remaining time.

Chairman SENSENBRENNER. The question is on the amendment to the amendment offered by the gentlewoman from California, Ms. Woolsey, relating to geothermal energy.

Those in favor will signify by saying aye.

Opposed, no.

Ms. WOOLSEY. Mr. Chairman, I would like a recorded vote, please.

Chairman SENSENBRENNER. Are you insinuating that I was going to say that the noes had it? [Laughter.]

If that's the case, the noes appear to have it, and the clerk will call the roll. [Laughter.]

Ms. WOOLSEY. Oh, Mr. Chairman, did I blow it?

The CLERK. Mr. Sensenbrenner.

Chairman SENSENBRENNER. No.

The CLERK. Mr. Sensenbrenner votes no. Mr. Boehlert.

[No response.]

The CLERK. Mr. Smith of Texas.

[No response.]

The CLERK. Mrs. Morella.

[No response.]

The CLERK. Mr. Weldon of Pennsylvania.

[No response.]

The CLERK. Mr. Rohrabacher.

Mr. ROHRABACHER. No.

The CLERK. Mr. Rohrabacher votes no. Mr. Barton.

Mr. BARTON. No.

The CLERK. Mr. Barton votes no. Mr. Calvert.

Mr. CALVERT. No.

The CLERK. Mr. Calvert votes no. Mr. Smith of Michigan.

Mr. SMITH of Michigan. No.

The CLERK. Mr. Smith votes no. Mr. Bartlett.

[No response.]

The CLERK. Mr. Ehlers.

Mr. EHLERS. No.

The CLERK. Mr. Ehlers votes no. Mr. Weldon of Florida.

Mr. WELDON of Florida. No.

The CLERK. Mr. Weldon votes no. Mr. Gutknecht.

Mr. GUTKNECHT. No.

The CLERK. Mr. Gutknecht votes no. Mr. Ewing.

[No response.]

The CLERK. Mr. Cannon.

Mr. CANNON. No.

The CLERK. Mr. Cannon votes no. Mr. Brady.

[No response.]

The CLERK. Mr. Cook.

Mr. COOK. No.

The CLERK. Mr. Cook votes no. Mr. Nethercutt.

Mr. NETHERCUTT. No.

The CLERK. Mr. Nethercutt votes no. Mr. Lucas.

Mr. LUCAS. No.

The CLERK. Mr. Lucas votes no. Mr. Green.

Mr. GREEN. No.

The CLERK. Mr. Green votes no. Mr. Kuykendall.

Mr. KUYKENDALL. No.

The CLERK. Mr. Kuykendall votes no. Mr. Miller.  
 Mr. MILLER. No.  
 The CLERK. Mr. Miller votes no. Mrs. Biggert.  
 Mrs. BIGGERT. No.  
 The CLERK. Mrs. Biggert votes no. Mr. Sanford.  
 Mr. SANFORD. No.  
 The CLERK. Mr. Sanford votes no. Mr. Metcalf.  
 [No response.]  
 The CLERK. Mr. Brown.  
 [No response.]  
 The CLERK. Mr. Hall.  
 Mr. HALL. Aye.  
 The CLERK. Mr. Hall votes yes. Mr. Gordon.  
 Mr. GORDON. Aye.  
 The CLERK. Mr. Gordon votes yes. Mr. Costello.  
 Mr. COSTELLO. Aye.  
 The CLERK. Mr. Costello votes yes. Mr. Barcia.  
 Mr. BARCIA. Aye.  
 The CLERK. Mr. Barcia votes yes. Ms. Johnson.  
 Ms. EDDIE BERNICE JOHNSON of Texas. Aye.  
 The CLERK. Ms. Johnson votes yes. Ms. Woolsey.  
 Ms. WOOLSEY. Aye.  
 The CLERK. Ms. Woolsey votes yes. Ms. Rivers.  
 Ms. RIVERS. Aye.  
 The CLERK. Ms. Rivers votes yes. Ms. Lofgren.  
 Ms. LOFGREN. Aye.  
 The CLERK. Ms. Lofgren votes yes. Mr. Doyle.  
 Mr. DOYLE. Aye.  
 The CLERK. Mr. Doyle votes yes. Ms. Jackson Lee.  
 [No response.]  
 The CLERK. Ms. Stabenow.  
 Ms. STABENOW. Aye.  
 The CLERK. Ms. Stabenow votes yes. Mr. Etheridge.  
 Mr. ETHERIDGE. Aye.  
 The CLERK. Mr. Etheridge votes yes. Mr. Lampson.  
 [No response.]  
 The CLERK. Mr. Larson.  
 Mr. LARSON. Aye.  
 The CLERK. Mr. Larson votes yes. Mr. Udall.  
 Mr. UDALL. Aye.  
 The CLERK. Mr. Udall votes yes. Mr. Wu.  
 Mr. WU. Aye.  
 The CLERK. Mr. Wu votes yes. Mr. Weiner.  
 Mr. WEINER. Aye.  
 The CLERK. Mr. Weiner votes yes. Mr. Capuano.  
 Mr. CAPUANO. Aye.  
 The CLERK. Mr. Capuano votes yes.  
 Chairman SENSENBRENNER. Are there additional members in the room who wish to cast their votes or any members who wish to change their votes?  
 Mrs. MORELLA. How am I recorded—Morella?  
 The CLERK. Mrs. Morella is not recorded.  
 Mrs. MORELLA. I vote no in hopes also that we can find an offset.  
 The CLERK. Mrs. Morella votes no.

Chairman SENSENBRENNER. Other members who wish to—the gentleman from Texas, Mr. Brady.

Mr. BRADY. Mr. Chairman, how am I recorded?

The CLERK. You are not recorded, sir.

Mr. BRADY. I would like to be recorded no.

The CLERK. Mr. Brady votes no.

Chairman SENSENBRENNER. Any members desire to change their votes? If not, the Clerk will report.

The CLERK. Mr. Chairman, yes, 17; no, 19.

Chairman SENSENBRENNER. And the amendment is not agreed to.

*offered by Ms. Woolsey to  
Amendment #5 by Mr. Udall*

COMMITTEE ON SCIENCE - ROLL CALL - 106<sup>th</sup> CONGRESS

DATE: *5-25-99* SUBJECT: *HR 1655, amendment #6*

Rm.	Phone	Member	Yes	No	Not Voting	Present	Absent
2332	55101	Mr. Sensenbrenner, R-WI		1			
2246	53665	Mr. Boehlert, R-NY					
2231	54236	Mr. Lamar Smith, R-TX					
2228	55341	Mrs. Morella, R-MD		18			
2452	52011	Mr. Curt Weldon, R-PA					
2338	52415	Mr. Rohrabacher, R-CA		2			
2264	52002	Mr. Barton, R-TX		3			
2201	51986	Mr. Calvert, R-CA		4			
306	56276	Mr. Nick Smith, R-MI		5			
2412	52721	Mr. Bartlett, R-MD					
1714	53831	Mr. Ehlers, R-MI		6			
332	53671	Mr. Dave Weldon, R-FL		7			
425	52472	Mr. Gutknecht, R-MN		8			
2417	52371	Mr. Ewing, R-IL					
118	57751	Mr. Cannon, R-UT		9			
1531	54901	Mr. Brady, R-TX		19			
1431	53011	Mr. Cook, R-UT		10			
1527	52006	Mr. Nethercutt, R-WA		11			
438	55565	Mr. Lucas, R-OK		12			
1218	55665	Mr. Green, R-WI		13			
512	58220	Mr. Kuykendall, R-CA		14			
1037	53201	Mr. Miller, R-CA		15			
508	53515	Mrs. Biggert, R-IL		16			
1233	53176	Mr. Sanford, R-SC		17			
1510	52605	Mr. Metcalf, R-WA					
2300	56161	Mr. Brown, D-CA					✓
2221	56673	Mr. Hall, D-TX	1				
2368	54231	Mr. Gordon, D-TN	2				
2454	55661	Mr. Costello, D-IL	3				
2419	58171	Mr. Barcia, D-MI	4				
1511	58885	Ms. Johnson, D-TX	5				
439	55161	Ms. Woolsey, D-CA	6				
1724	56261	Ms. Rivers, D-MI	7				
318	53072	Ms. Lofgren, D-CA	8				
133	52135	Mr. Doyle, D-PA	9				
410	53816	Ms. Jackson-Lee, D-TX					
1039	54872	Ms. Stabenow, D-MI	10				
1641	54531	Mr. Etheridge, D-NC	11				
417	56565	Mr. Lampson, D-TX					
1419	52265	Mr. Larson, D-CT	12				
128	52161	Mr. Udall, D-CO	13				
510	50855	Mr. Wu, D-OR	14				
501	56616	Mr. Weiner, D-NY	15				
1232	55111	Mr. Capuano, D-MA	16				
TOTAL			16	19			

Attest: *Patricia Stewart* (Clerk)



Chairman SENSENBRENNER. The question, now, is on the original amendment offered by the gentleman from Colorado, Mr. Udall.

Those in favor of the amendment will signify by saying aye.

Opposed, no.

Mr. UDALL. Mr. Chairman.

Chairman SENSENBRENNER. The noes appear to have it.

Mr. UDALL. I would like to ask for a recorded vote.

Chairman SENSENBRENNER. A recorded vote will be ordered.

Those in favor of the Udall amendment will signify by saying aye; those opposed, no, and the clerk will call the roll.

The CLERK. Mr. Sensenbrenner.

Chairman SENSENBRENNER. No.

The CLERK. Mr. Sensenbrenner votes no. Mr. Boehlert.

[No response.]

The CLERK. Mr. Smith of Texas.

[No response.]

The CLERK. Mrs. Morella.

Mrs. MORELLA. No.

The CLERK. Mrs. Morella votes no. Mr. Weldon.

[No response.]

The CLERK. Mr. Rohrabacher.

Mr. ROHRABACHER. No.

The CLERK. Mr. Rohrabacher votes no. Mr. Barton.

Mr. BARTON. No.

The CLERK. Mr. Barton votes no. Mr. Calvert.

Mr. CALVERT. No.

The CLERK. Mr. Calvert votes no. Mr. Smith.

Mr. SMITH of Michigan. No.

The CLERK. Mr. Smith votes no. Mr. Bartlett.

[No response.]

The CLERK. Mr. Ehlers.

Mr. EHLERS. No.

The CLERK. Mr. Ehlers votes no. Mr. Weldon of Florida.

Mr. WELDON of Florida. No.

The CLERK. Mr. Weldon votes no. Mr. Gutknecht.

Mr. GUTKNECHT. No.

The CLERK. Mr. Gutknecht votes no. Mr. Ewing.

[No response.]

The CLERK. Mr. Cannon.

Mr. CANNON. No.

The CLERK. Mr. Cannon votes no. Mr. Brady.

[No response.]

The CLERK. Mr. Cook.

Mr. COOK. No.

The CLERK. Mr. Cook votes no. Mr. Nethercutt.

Mr. NETHERCUTT. No.

The CLERK. Mr. Nethercutt votes no. Mr. Lucas.

Mr. LUCAS. No.

The CLERK. Mr. Lucas votes no. Mr. Green.

[No response.]

The CLERK. Mr. Kuykendall.

Mr. KUYKENDALL. No.

The CLERK. Mr. Kuykendall votes no. Mr. Miller.

Mr. MILLER. No.

The CLERK. Mr. Miller votes no. Mrs. Biggert.  
 Mrs. BIGGERT. No.  
 The CLERK. Mrs. Biggert votes no. Mr. Sanford.  
 Mr. SANFORD. No.  
 The CLERK. Mr. Sanford votes no. Mr. Metcalf.  
 [No response.]  
 The CLERK. Mr. Brown.  
 [No response.]  
 The CLERK. Mr. Hall.  
 Mr. HALL. Aye.  
 The CLERK. Mr. Hall votes yes. Mr. Gordon.  
 Mr. GORDON. Aye.  
 The CLERK. Mr. Gordon votes yes. Mr. Costello.  
 Mr. COSTELLO. Aye.  
 The CLERK. Mr. Costello votes yes. Mr. Barcia.  
 Mr. BARCIA. Aye.  
 The CLERK. Mr. Barcia votes yes. Ms. Johnson.  
 Ms. EDDIE BERNICE JOHNSON of Texas. Aye.  
 The CLERK. Ms. Johnson votes yes. Ms. Woolsey.  
 Ms. WOOLSEY. Aye.  
 The CLERK. Ms. Woolsey votes yes. Ms. Rivers.  
 Ms. RIVERS. Aye.  
 The CLERK. Ms. Rivers votes yes. Ms. Lofgren.  
 Ms. LOFGREN. Aye.  
 The CLERK. Ms. Lofgren votes yes. Mr. Doyle.  
 Mr. DOYLE. Aye.  
 The CLERK. Mr. Doyle votes yes. Ms. Jackson Lee.  
 [No response.]  
 The CLERK. Ms. Stabenow.  
 Ms. STABENOW. Aye.  
 The CLERK. Ms. Stabenow votes yes. Mr. Etheridge.  
 Mr. ETHERIDGE. Aye.  
 The CLERK. Mr. Etheridge votes yes. Mr. Lampson.  
 [No response.]  
 The CLERK. Mr. Larson.  
 Mr. LARSON. Aye.  
 The CLERK. Mr. Larson votes yes. Mr. Udall.  
 Mr. UDALL. Aye.  
 The CLERK. Mr. Udall votes yes. Mr. Wu.  
 Mr. WU. Aye.  
 The CLERK. Mr. Wu votes yes. Mr. Weiner.  
 Mr. WEINER. Aye.  
 The CLERK. Mr. Weiner votes yes. Mr. Capuano.  
 Mr. CAPUANO. Aye.  
 The CLERK. Mr. Capuano votes yes.  
 Chairman SENSENBRENNER. Are there additional members in the chamber who wish to cast their vote or change their vote? The gentleman from Maryland, Mr. Bartlett.  
 Mr. BARTLETT. Aye.  
 The CLERK. Mr. Bartlett votes yes.  
 Chairman SENSENBRENNER. The gentleman from Washington, Mr. Metcalf.  
 Mr. METCALF. No.  
 The CLERK. Mr. Metcalf votes no.

Chairman SENSENBRENNER. The gentleman from Wisconsin, Mr. Green.

Mr. GREEN. No.

The CLERK. Mr. Green votes no.

Chairman SENSENBRENNER. The gentleman from Texas, Mr. Brady.

Mr. BRADY. I would like to be recorded no, Mr. Chairman.

The CLERK. Mr. Brady votes no.

Chairman SENSENBRENNER. Anybody else who wish to cast their vote or change their votes? If not, the Clerk will report.

The CLERK. Mr. Chairman, 17 yes; 20, no.

Chairman SENSENBRENNER. And the amendment is not agreed to.

COMMITTEE ON SCIENCE - ROLL CALL - 106<sup>th</sup> CONGRESS

DATE: 5-25-99 SUBJECT: HR 1655, amendment # 5 by Mrs. Udall

Rm.	Phone	Member	Yes	No	Not Voting	Present	Absent
2332	55101	Mr. Sensenbrenner, R-WI		1			
2246	53665	Mr. Boehlert, R-NY					
2231	54236	Mr. Lamar Smith, R-TX					
2228	55341	Mrs. Morella, R-MD		2			
2452	52011	Mr. Curt Weldon, R-PA					
2338	52415	Mr. Rohrabacher, R-CA		3			
2264	52002	Mr. Barton, R-TX		4			
2201	51986	Mr. Calvert, R-CA		5			
306	56276	Mr. Nick Smith, R-MI		6			
2412	52721	Mr. Bartlett, R-MD	17				
1714	53831	Mr. Ehlers, R-MI		7			
332	53671	Mr. Dave Weldon, R-FL		8			
425	52472	Mr. Gutknecht, R-MN		9			
2417	52371	Mr. Ewing, R-IL					
118	57751	Mr. Cannon, R-UT		10			
1531	54901	Mr. Brady, R-TX		19			
1431	53011	Mr. Cook, R-UT		11			
1527	52006	Mr. Nethercutt, R-WA		12			
438	55565	Mr. Lucas, R-OK		13			
1218	55665	Mr. Green, R-WI		20			
512	58220	Mr. Kuykendall, R-CA		14			
1037	53201	Mr. Miller, R-CA		15			
508	53515	Mrs. Biggert, R-IL		16			
1233	53176	Mr. Sanford, R-SC		17			
1510	52605	Mr. Metcalf, R-WA		18			
2300	56161	Mr. Brown, D-CA					✓
2221	56673	Mr. Hall, D-TX	1				
2368	54231	Mr. Gordon, D-TN	2				
2454	55661	Mr. Costello, D-IL	3				
2419	58171	Mr. Barcia, D-MI	4				
1511	58885	Ms. Johnson, D-TX	5				
439	55161	Ms. Woolsey, D-CA	6				
1724	56261	Ms. Rivers, D-MI	7				
318	53072	Ms. Lofgren, D-CA	8				
133	52135	Mr. Doyle, D-PA	9				
410	53816	Ms. Jackson-Lee, D-TX					
1039	54872	Ms. Stabenow, D-MI	10				
1641	54531	Mr. Etheridge, D-NC	11				
417	56565	Mr. Lampson, D-TX					
1419	52265	Mr. Larson, D-CT	12				
128	52161	Mr. Udall, D-CO	13				
510	50855	Mr. Wu, D-OR	14				
501	56616	Mr. Weiner, D-NY	15				
1232	55111	Mr. Capuano, D-MA	16				
TOTAL			17	20			

Attest: Patricia Schwartz (Clerk)

Chairman SENSENBRENNER. The gentlewoman from Texas, Ms. Johnson, has another obligation to go to, and I'm going to call on her for amendment number eight, out of order.

Ms. EDDIE BERNICE JOHNSON of Texas. Thank you, Mr. Chairman.

Chairman SENSENBRENNER. For what purpose does the gentlewoman from Texas rise?

Ms. EDDIE BERNICE JOHNSON of Texas. Strike the last word.

Chairman SENSENBRENNER. The gentlewoman is recognized for five minutes.

[The information follows:]

Page 22, lines 2 through 10, strike subsections (a) and (b).

Page 22, lines 11, 16, and 23, page 23, line 6, and page 24, line 1, redesignate subsections (c) through (g) as subsections (a) through (e) respectively.

Ms. EDDIE BERNICE JOHNSON of Texas. Thank you. I thank the majority for agreeing to strike the language prohibiting funding for the High Performance Computing and Communications Program in the manager's amendment. I would ask unanimous consent that the report language on the High Performance Computer Program include the same statement that was included in the NOAA authorization bill indicating that the funding for this program was excluded without prejudice.

I would also ask that a footnote be included in the table accompanying the bill on the line which now simply indicates zero funding for the High Performance Computer Program. A footnote should be added that specifically references the report language on the HPCC Program to ensure that the reason for the exclusion of funding is clear. As the table now reads, it simply appears to fund the HPCC Program.

Chairman SENSENBRENNER. Will the gentlewoman yield?

Ms. EDDIE BERNICE JOHNSON of Texas. I'll yield.

Chairman SENSENBRENNER. As I stated in my opening statement at the beginning of the meeting today, it is my hope that we will have a discussion draft in the hands of everybody, including the minority, before we leave here on Thursday, of an overall HPCC and IT-squared bill. The reason I am doing it this way rather than actually introducing a bill is that I want to get input before we get the bill into final form, which I think will probably speed up its consideration when we deal with this next month. But, certainly, I support what the gentlewoman from Texas has said, and, without objection, the requests contained in the first statement are agreed to.

Is there any objection?

[No response.]

Hearing none, so ordered, and you still have some time left.

Ms. EDDIE BERNICE JOHNSON of Texas. Thank you very much, Mr. Chairman. I will yield back my time.

Chairman SENSENBRENNER. Okay. Amendment number seven by Mr. Costello. For what purpose does Mr. Costello seek recognition?

Mr. COSTELLO. Mr. Chairman, I have an amendment at the desk.

Chairman SENSENBRENNER. The clerk will report the amendment.

The CLERK. Amendment to H.R. 1655 offered by Mr. Costello—

Chairman SENSENBRENNER. Without objection, the amendment is considered as read, and the gentleman from Illinois is recognized for five minutes.

[The information follows:]

Page 5, line 10, strike "\$30,000,000" and insert "\$25,000,000".  
 Page 5, line 11, strike "\$35,000,000" and insert "\$25,000,000".  
 Page 6, line 2, strike "\$2,557,761,000" and insert "\$2,707,761,000".  
 Page 7, line 3, strike "\$357,714,000" and insert "\$352,714,000".  
 Page 7, line 4, strike "\$375,600,000" and insert "\$360,600,000".  
 Page 7, line 6, strike "\$413,674,000" and insert "\$403,674,000".  
 Page 7, line 7, strike "\$434,357,000" and insert "\$414,357,000".  
 Page 7, line 9, strike "\$698,800,000" and insert "\$688,800,000".  
 Page 7, line 10, strike "\$733,740,000" and insert "\$718,740,000".  
 Page 9, line 3, strike "and".  
 Page 9, line 6, strike the period and insert "; and".  
 Page 9, after line 6, insert the following new paragraph:

(11) \$150,000,000 for fiscal year 2000 shall be for construction of Project 99-E-334, Spallation Neutron Source, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

Page 22, lines 11 through 15, amend subsection (c) to read as follows:

(c) CONSTRUCTION OF SPALLATION NEUTRON SOURCE PROJECT.—None of the funds authorized by section 3(b)(11) may be obligated until the Secretary—

(1) certifies in writing to the Committee on Science of the House of Representatives and the Committee on Energy and Natural Resources of the Senate that senior project management positions for the project have been filled; and

(2) provides the Committee on Science of the House of Representatives and the Committee on Energy and Natural Resources of the Senate with—

(A) a cost baseline and project milestones for each major construction and technical system activity; and

(B) a revised project management structure that integrates the staff of the collaborating laboratories working on the project under a single project director.

The Secretary shall report on the Spallation Neutron Source Project 99-E-334 annually, as part of the Department's annual budget submission, including a description of the achievement of milestones, a comparison of actual costs to estimated costs, and any changes in estimated project costs or schedule.

Page 24, after line 19, insert the following new subsection:

(h) PERCENTAGE REDUCTION.—Notwithstanding any other provision of this Act, each of the amounts authorized by this Act for fiscal year 2000 or 2001 shall be reduced by .74 percent, with such reduction representing a reduction in travel costs.

Mr. COSTELLO. Mr. Chairman, thank you. Members of the Committee, my amendment would restore construction funding for the project known as the Spallation Neutron Source. The Chairman, in drafting this bill, included \$17.9 million for R&D only and zero for construction for the Spallation project. This bill, as it's currently written, would kill the Spallation Neutron project by no construction funds in either Fiscal Year 2000 or Fiscal Year 2001. This Committee, according to the project manager, would effectively pull the plug on the Nation's number one neutron science project.

Mr. Chairman, I know you have had major concerns with this project after reading the GAO report and visiting the Oak Ridge Lab in Oak Ridge, Tennessee. They are valid concerns; many of them, frankly, I agree with. I shared your concerns about missed deadlines and past mismanagement practices of the SNS. I read your travel report, and I decided to visit the laboratory to see for myself what DOE is doing to rectify these problems. I met with Dr. David Moncton who, as the DOE Project Chairperson and Project Manager, was recently appointed by DOE to be the Project Manager.

As you know, Mr. Chairman, Dr. Moncton is one of the Nations' most highly regarded scientists. He has a history with big DOE

projects, such as the Advanced Photon Source; getting them done on time and under budget. I believe he is the appropriate and, perhaps, the only person who could steer the SNS project back on course.

Since your visit and my visit to the Oak Ridge Lab, Mr. Chairman, Dr. Moncton has begun to address the concerns in the GAO report and the concerns that you raised in your travel report as well as the concerns that I expressed to him on my visit. He has begun to hire a skilled management team for the project. He has worked to strengthen memoranda of understanding with the five other laboratories—Argonne, Brookhaven, Los Alamos, Oak Ridge, and Berkeley—involved in this project. He is preparing a new budget baseline at your request for this Committee, which is due in July. I have been impressed by Dr. Moncton's willingness to work with the Chairman and members of this Committee in moving the SNS project forward in a cooperative effort. That is why I met with you in April and earlier this month in an effort to reach an agreement to move forward with the SNS project.

I would like to outline briefly for the Committee what I have done in my amendment to address the concerns that have been raised by the GAO, your travel report, and concerns that we have raised on our side, as well. Number one, my amendment provided to this Committee, it provides a realistic number. As you know, in the President's request, the President request \$214 million for the SNS project, of which—I am sorry, \$196 million was designated for construction. I have worked with DOE to come up with a realistic number for construction funding for Fiscal Year 2000 for the project. I believe \$150 million in construction in Fiscal Year 2000 will put the project back on schedule and on budget. As you will recall, Mr. Chairman, this number is down from the Administration's request from \$196 million.

Number two, we place conditions on spending the funds. My amendment includes conditions, some of which you endorsed in your travel report, including a requirement that the Secretary of Energy certify to this Committee that major positions be filled before funding is released. A new baseline must be submitted and that operational management structure be centralized for stronger control of the project's progress.

Number three, I considered offering an amendment today without offsets, but after a discussion with you, I decided to try and comply with all of your concerns—address all of your concerns in your request. So, this amendment that I am offering offers an offset to the construction funding. Mr. Chairman, you asked us to come up with the offsets from H.R. 1655 to pay for the construction of SNS. I have done so. My amendment calls for an offset of \$150 million to offset the construction cost for Fiscal Year 2000.

Mr. Chairman, the members of this side of the aisle have worked for several weeks to meet the concerns that the GAO has pointed out, your concerns, and concerns that we have had. We have attempted to address all of the issues that you have raised—

Chairman SENSENBRENNER. The gentleman's time has expired.

Mr. ROHRABACHER. Mr. Chairman. May I ask unanimous consent that the gentleman be given an additional minute to finish his statement?

Chairman SENSENBRENNER. Without objection.

Mr. COSTELLO. I thank Mr. Rohrabacher. Mr. Chairman, let me say that we have attempted to address all of the issues that you have raised, issues that concern us, and issues pointed out in the GAO report. We have provided offsets. Mr. Chairman, this Committee has a choice today: we can either support the Costello amendment, moving forward with a scaled-down authorization level of \$150 million with conditions that must be met before the money can be spent or we can take no action whatsoever, which will, in effect, kill the spallation neutron project.

With that, Mr. Chairman, I would yield back the balance of my time.

Chairman SENSENBRENNER. The gentleman's time has expired.

For what purpose does the gentleman from Texas seek recognition?

Mr. BARTON. Strike the last word.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. BARTON. Thank you, Mr. Chairman. I'm in a very difficult position on this amendment. I can remember when this Subcommittee and the full Committee was addressing the Super Collider project, which we ultimately killed on an amendment on the Floor, and I think that was one of the most short-sided actions that this Congress has taken in the last 20 years. I'm obviously not as involved with this particular project, but I want to commend Mr. Costello for what he's done. I think that this Committee has an obligation to fund basic research, and I think this is very basic research. I think the bottom line project is a good project.

I understand the Chairman's concern about not going forward until all the administrative and budget guidelines have been set, and I haven't decided how I'm going to vote on this amendment yet, so I'd like to yield to the Chairman to find out what your position is. Are you trying to make sure that some of the things that Congressman Costello is now putting on the table are put into the bill or are you literally trying to kill this project?

Chairman SENSENBRENNER. Will the gentleman yield?

Mr. BARTON. I'll be happy to yield to the distinguished Chairman.

Chairman SENSENBRENNER. I thank the gentleman from Texas for yielding.

First of all, let me say I support the Spallation Neutron Source, and I support it being built in Tennessee, and I have said that to anybody who has asked me that question and to a lot of people who haven't asked me that question.

The question, however, before us today is whether we are going to insist that the Department of Energy manage this project properly so that we don't get ourselves into a position like what happened with the Superconducting Super Collider where we went ahead and gave them the money; we ignored significant management problems, including their inability to put together and live by a baseline for the constructing the SSC. I don't want to see history repeat itself, and I don't want the Science Committee, on our watch, to go along with authorizing the money for this program given the fact that there have been significant management lapses



identified both by the General Accounting Office and by the EG&G firm that the Department of Energy hired late last year or the first part of this year to review what has been going on.

The DOE fired the previous project manager after these reports came up. We were told we were to have a baseline by January of this year; now, it's due sometime in July, and to go ahead with the project that the projected cost is \$1.3 billion without having the budget I think is just flat out irresponsible.

Mr. BARTON. Could I reclaim my time and ask another question?

Chairman SENSENBRENNER. Certainly.

Mr. BARTON. Well, as I understand Congressman Costello's amendment, he wants to maintain some funding level for construction, and anybody who's ever looked at any of these long-term projects know, at some point in time, you have to actually begin to construct. So, is it the Chairman's—are you basically postponing the decision to construct for a year or do you assume that at some point in this budget year we will authorize construction at the full Committee?

Chairman SENSENBRENNER. No, I assume that sometime in this budget year, if the DOE gets its act together and gives us the proper information, we can consider authorizing the construction without prejudice as to what the DOE is going to come up with.

Mr. BARTON. So, do we—and, again, I have not been privy to these negotiations, so I'm kind of coming in here at the last minute on this—but is it your intention, then, sometime in the next 3 to 4 months to move an authorization on this particular project that includes construction?

Chairman SENSENBRENNER. If the DOE comes in with the appropriate figures, I believe that we should introduce a separate bill authorizing the construction of the Spallation Neutron Source, and I have it considered in this Committee.

Mr. BARTON. And you would work with interested members on doing that?

Chairman SENSENBRENNER. I certainly would work with interested members in doing that, but I'm afraid giving the DOE the money before they answer all these questions that have been raised and which are legitimate is putting the cart before the horse.

Mr. BARTON. I'd yield to Mr. Costello. I think he's got a—

Mr. COSTELLO. I think the gentleman from Texas for yielding.

Mr. Chairman, let me say—I have said this to you, and I will say it to the Committee members—I commend you for the action that you've taken. It's because of the issues that you have brought to the table that we are here today. We want what you want, and that is for the project to go forward but to make sure that it's managed in a way that can come in under budget and manage properly.

My concern today is that: if we're going to do a free-standing bill, where are we going to get the appropriations? We're talking about offsets. I was required to submit an amendment today that would require offsets as opposed to \$150 million add-on to the authorization. I am concerned that if we leave here today that this project, in fact, will be dead, and I would like to elaborate—

Chairman SENSENBRENNER. The time of the gentleman from Texas has expired.

For what purpose does the gentleman from Tennessee seek recognition?

Mr. GORDON. To strike the last word.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. GORDON. Thank you, Mr. Chairman.

I want to give a couple of compliments, first, to my friend from Texas for the good points that he raised, trying to get us focused on what this debate is all about, and, secondly, I want to concur with Jerry Costello's compliments of the Chairman. It has been an arduous, sometimes painful, trip to get us to this point, but we have a better bill, a better situation because of the tough questions that Chairman Sensenbrenner has asked, and because he asked those tough questions, Jerry Costello has put contingencies into this bill that none of this money can be spent unless those timelines and those contingencies are met and met timely. So, the plug will be pulled if those very legitimate questions aren't answered. So, that should be taken care of. We don't need to wait till later. We put those contingencies in now.

The second question of offsets. Mr. Costello has put forth offsets in his bill.

So, let's make it clear what we're talking about right now. We've had discussions about priorities today. Should we put a little more money into solar? Should we put a little less here? And what kind of priorities are we sending? When you're talking about the Spallation project, you're not talking about priorities, you're talking about killing it or moving forward. There is no little bit here or little bit there.

And let me read to you from the respected publication, *Nature*, May 6, 1999 issue, and I think it says it very well: "If the construction money is halted by the Congress at this early stage, the project will quickly enter a spiral of delays and cost overruns that will probably destroy it." And, so this is a vote either for it or against it.

If you vote against it, let me tell you what you're voting against. Right now, American researchers have to go overseas to have neutron research, and so we simply can't get the research done that we need. This will be the only facility in the United States. It will be 10 times more powerful than any other facility in the country, and what are they trying to do and what will you be voting against if you vote against this? You'll be voting against discovering drug delivery systems that release a medicine precisely when and where it's needed in the body to relieve pain without side effects. You'll be voting against the necessary research for artificial blood. You'll be voting against research necessary for medical implants, like artificial hips and knees that have a lifetime use. You're going to be voting against lubricants that are specially tailored for tomorrow's efficient, emission-free engines. You're going to be voting against the technology that's necessary to learn more about superconducting wires and stronger magnets that can bring lower power costs and much faster trains that will float above magnetic levels. You're going to be voting against the research that's necessary for stronger, lighter materials.

This is not about priorities; this is not about "Well, we'll do a little bit now; we'll do a little bit later; we'll try to fit it in." This is a vote just squarely either to go forward or we kill it. The contingencies that were well raised are in here. The offsets are in this. This is a good amendment. Either vote for having the United States have the ability to have a spallation project or you vote to kill it.

Chairman SENSENBRENNER. Mr. Chairman, I strike the last word and yield myself five minutes.

Mr. Chairman, let me say that I think that while the efforts of the gentleman from Illinois and the gentleman from Tennessee are rather well on point, their amendment doesn't go as far as it should. The amendment authorizes \$150 million for SSN for the year 2000, but there are only \$90 million in offsets, of which, only \$30 million are in Fiscal 2000, and an additional \$60 million are in Fiscal Year 2001. So, there is no money authorized in the amendment by the gentleman from Illinois for Fiscal Year 2001, but they take money away from other programs in Fiscal Year 2001 to spend in Fiscal Year 2000, which I don't think is a very good idea.

There is also one other issue that the gentleman from Illinois' amendment does not address, and that is the fact that the State of Tennessee charges a use tax for the construction of a project within Tennessee that is estimated at the present time to cost \$1.3 billion, and I think it is outrageous that any State that secures Federal procurement then turns around and sticks the Federal taxpayers with a use tax for the honor of building that project within that State.

Mr. COSTELLO. Would the Chairman yield on that particular point?

Chairman SENSENBRENNER. No, I didn't interrupt you; I'm going to make this point. If the amendment contained this type of language prohibiting the State of Tennessee from charging use tax, I think that we would be well on the road to negotiating making sure that this is not going to cost the taxpayers more by locating it in Tennessee than in a State that does not charge a use tax. And I do have a letter from the Governor and the speakers of both houses of the State legislature saying that that would not be the case, but there is no statutory authority that there will be no tax charged either in the gentleman from Illinois' amendment or in Tennessee legislation.

Now, I support funding the science behind the SNS, but before we pump hundreds of millions of dollars into construction, we need to have better answers from DOE. This amendment does not guarantee that we get the better answers from DOE. If we get an answer, whether it's a good answer or a rotten answer, they get the money, and they are able to dig the hole, and we don't come back to revisit this issue until this project is actually under construction.

Now, you may recall a similar scenario a few years ago with regards to the Super Collider. Construction began and soon thereafter the project began to lose political support because the DOE could not control spiraling program costs, and eventually the House canceled the SSC. The taxpayer was left holding the bill for an ex-

pensive hole in the ground, and I don't want that to happen again here.

The Costello amendment would fund construction of the SNS even before the DOE has fully developed a project schedule and cost estimates. The DOE report says it will be another 6 months before a baseline with adequate contingencies is available. A few weeks ago, the DOE reduced what it said it needed, and this amendment further reduces what it needs, and I think that this shows how fluid these figures are.

Let me mention a few other shortcomings. This is a complex project which, as proposed, requires an unprecedented level of co-operation among five different DOE labs operated by four different contractors. Although a draft memorandum of agreement with the labs has been floated by DOE, it remains unsigned, and until this MOA is legally binding, I'm concerned that Mr. Monkton, the Director of the SNS project, who is a good person, won't have authority over the other participating labs' employees.

The project is still without a technical director. A DOE report says that Oak Ridge needs an adequate level of technical management. It needs a full-time operations manager. It needs a manager to oversee construction of the facilities that will house the equipment and instruments being built.

Finally, I can't accept this amendment, because the offsets contained do not offset on a dollar-for-dollar basis. As I pointed out, there is \$150 million being authorized for Fiscal 2000 and only \$30 million of offsets for 2000 and another \$60 million offset for 2001 where there is no authorization that is contained therein.

So, I think that the amendment is not properly drafted, as well. It changes certain amounts and accounts but does not change the overall totals. Part of the problem is that we were not given this amendment until just a few minutes before the markup began.

I would hope that we would listen to the Vice President where he was talking in his National Performance Review that we, as a Government, ensure that the taxpayers get a dollar's worth of value for a dollar of tax money spent. This amendment does not guarantee that. I would hope that we would wait for the DOE to get its together, and my time has expired.

For what purposes does the gentleman from North Carolina, Mr. Etheridge, seek recognition?

Mr. ETHERIDGE. I move to strike the last word, Mr. Chairman.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. ETHERIDGE. Thank you, Mr. Chairman. I yield to Mr. Gordon.

Mr. GORDON. Thank you. I guess we've all heard that cliché that two people can see an accident, and they describe it differently. The Chairman and I are seeing the same accident, I thought, but apparently we are seeing it very different. As I pointed out earlier he has raised very good significant questions, and I think we've tried to address those.

Let me go, first, to the concern about Tennessee getting some kind of a windfall. First of all, this project is going to be dealt with in all five of the national labs. Tennessee will be the location of, I guess, the central location of it, but it's going to be in all the labs.

Now, we have a letter from the Governor of Tennessee—well, first of all, we offered to put in the legislation anything he wanted concerning that Tennessee wasn't going to get some kind of windfall from sales tax, but we were rejected, because that would give jurisdiction to Ways and Means, and you didn't want to share jurisdiction here. So, we said, "Fine." We got a letter from our Republican Governor, Don Sunquist, signed by the Speaker of the House and the Senate, saying that whatever legislation was necessary to hold the Federal taxpayer harmless so that it would not cost anymore to build this project or a portion of it in Tennessee than anywhere else, they would pass that legislation.

Now, again, what are we talking about? This is almost \$1.5 billion project. They said that there might be as much as \$30 million in taxes over the entire period in all of the states involved. Now, every state has some kind of sales tax of some nature, but it doesn't matter. We've got a letter from the Governor; it can be put in the record. Put it in the legislation if you want to give Ways and Means jurisdiction—I am satisfied with it—that the Federal taxpayer will be held harmless. It will cost no more to build there. So, that should be off the table.

The other questions concerning these other contingencies, I'm going to yield to Mr. Costello who has, I think, done a herculean effort in addressing all of these.

Mr. COSTELLO. Mr. Chairman, let me try and address a few points that you made. Number one, you had said that we show \$90 million in offsets as opposed to \$150 million. There are \$150 million in offsets. I believe what you may not be taking into account is the \$60 million that we are getting out of the DOE travel account.

Chairman SENSENBRENNER. Will the gentleman yield?

Mr. COSTELLO. I'd be happy to.

Chairman SENSENBRENNER. Could you please specify those offsets and tell us what is spread between Fiscal 2000 and Fiscal 2001?

Mr. COSTELLO. Mr. Chairman, the travel account is \$60 million; the offset is \$70 million in each fiscal year for contractors and Government travel; number two, biological and environmental research by \$30 million; number three—

Chairman SENSENBRENNER. In which years?

Mr. COSTELLO. The travel offsets are \$30 million in Fiscal Year 2000; \$30 million in Fiscal Year 2001. The nuclear research, \$5 million in Fiscal Year 2000; \$10 million Fiscal Year 2001. The biological and environmental, \$10 million the first year; \$20 million the second year. In basic energy, \$10 million the first year; \$15 million the next year. And I have a list that I would be happy to provide you and the members of the Committee.

This is a 2-year authorization bill. It seems that every step that we have taken to try and reasonably move this project forward but without allowing the Department of Energy to spend money on the project—

Chairman SENSENBRENNER. Will the gentleman yield further?

Mr. COSTELLO. Let me—if I can finish, and then I'd be happy to yield to the Chairman.

We've tried to take every reasonable step possible by offering offsets. I am told now that because we have offset this, the \$150 million over the 2 years—it's a 2-year authorization bill—that that is—the Chairman has expressed concerns about the 2-year authorization of the 2-year offset. I have checked with legal counsel. There is no reason why we cannot offset over 2 years other than if the Chairman objects to it.

Chairman SENSENBRENNER. Well, if the gentleman will yield—the gentleman from North Carolina will yield—

Mr. COSTELLO. I'd be happy to.

Chairman SENSENBRENNER [continuing]. I have added up the offsets that the gentleman has just explained, and they are \$55 million out of 2000; \$75 million out of 2001, for a total of \$130 million. That's one of the problems. The second problem that I had is that your amendment provides no construction funds for Fiscal Year 2001, and what you're doing is you're using funds that are authorized for other programs in 2001 to offset construction in the year 2000. That's playing games with the money, I think.

Mr. COSTELLO. Well, reclaiming my time, the fact is the reason we didn't include money—authorization in 2001 is because we did not want to authorize 2001 construction funds until we made certain that the Department of Energy was managing this project according to this amendment and according to the triggers we put in place.

Chairman SENSENBRENNER. The gentleman's time has expired, and I'd ask unanimous consent the gentleman from North Carolina be given an additional minute so we can conclude this discussion.

Mr. COSTELLO. Mr. Chairman, I think the bottom line here is this: you have said in your travel report, we have had meetings that you want to seek the Spallation project move forward. The fact is the President sent this budget over. It had \$214 million in for Spallation; \$196 million for construction. You took that amount of money—the \$196 million—and distributed it over other projects that you felt are priorities in this budget leaving us at zero. I have attempted to do what I think is reasonable. I have \$150 million in offsets. It's over the 2-year authorization. It does not cut into projects that are important to members of this Committee and the scientific community. I think it's a reasonable amendment, and I think our goals are the same—we want to move the project forward, but we do not want DOE to spend the money—

Chairman SENSENBRENNER. If the gentleman will yield?

Mr. COSTELLO. I'd be happy to.

Chairman SENSENBRENNER. Then why couldn't you find the offsets in the year that you wanted to spend the money, because none of us are able to spend next year's income on this year's goodies?

Mr. COSTELLO. Reclaiming my time. In all due respect, we attempted to do that, but we got no cooperation from the majority. We attempted to lay offsets on the table for the first year and work with the majority if in fact they wanted to see spallation move forward. We were told that we had to come up with all \$150 million and that the majority would not be submitting offsets for consideration. So, we tried to do it in a bipartisan way; it was rejected, and that's the reason we are here today.

Chairman SENSENBRENNER. If the gentleman will yield further?

Mr. COSTELLO. I'd be happy to.

Chairman SENSENBRENNER. We got this amendment just as the markup was beginning. Now, I've heard a lot of complaints from the minority side, which were valid, that legislation and amendments were not shared with the minority before the first markup that we had. I think that we ought to share amendments so that they can be analyzed and we don't have amendments explained in the course of a markup, and would hope that the minority, in the future, would give us the same consideration that they have demanded of us with amendments that we would like to offer.

Mr. COSTELLO. Mr. Chairman, reclaiming my time, if I can, and I will conclude. You make a valid point. I think the point is weeks ago when the majority decided where the money would go for spallation—the \$196 million that the President put in—had we been consulted at that time, had we had a markup at the Subcommittee level, which we should have had and maybe even a hearing on a project of this magnitude at the full Committee level so Committee members could hear from the Assistant Secretary and from D. Moncton, we might be at a different place today.

Chairman SENSENBRENNER. The gentleman's time has expired.

For what purpose does the gentleman from Michigan seek recognition?

Mr. EHLERS. To strike the last word.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. EHLERS. I hope I won't use that much time, Mr. Chairman, because I think we should draw this to a close.

I support building the Spallation Neutron Source. I think it can contribute a great deal to our knowledge of the structure of matter. I believe it should be built, but it should not be started until we clear up the questions that have been raised. And the problem, I believe, with the amendment is that it does not specify clearly enough what questions have to be raised. There's far more to be dealt with here. I am surprised this has become a partisan issue, and I think it's not on the substance of the issue. I think there's support on both sides of the aisle to do this. There's a difference on the process to be used.

And I simply have to say, based on the experience I've had in going through the Large Hadron Collider, which I was very concerned about the prospects of that, the Chairman took it upon himself to solve the problems. He flew to CERN; negotiated a better agreement which took care of the problems. I've heard from a number of high energy physicists over the years that the work that he did has really made their job and their ability to get the research done much easier and much better. I have faith in the Chairman to do the same here—to resolve the issues by working with the DOE. I'm willing to wait a few months and give him the opportunity to do as he did with the Large Hadron Collider—resolve the problems and bring this project to the House in an appropriate fashion. The last thing that we need to do is to get this project off on the wrong foot and have it end up in the gutter as a result.

Mr. GORDON. Would you yield, please? Mr. Ehlers, would you yield?

Mr. EHLERS. Who's asking? Yes, I will yield.

Mr. GORDON. Thank you. I concur with your concerns about being sure that those questions that were raised earlier are addressed before the money is spent. That's why, working with the majority counsel, Mr. Costello has four contingencies in this bill that address those concerns that have to be met and will be met, and they have a panel that will be making a report back in July before the money can be spent. And, so your concerns will be met within this bill.

Mr. EHLERS. Reclaiming my time. They will not be met within this amendment, and I don't want to get into a nit-picky battle on it but simply say, looking at the conditions that the Secretary of Energy has to provide the Committee on Science, et cetera, with a cost baseline and project milestones for each major construction technical system activity. This does indicate that in any way we approve them; all they have to do is provide it and automatically they have met the condition. A revised project management structure—again, not that it has to be a good one; it could be a terrible one, but once they submit it, the project can go forward. I think we're looking for a lot more specificity than we can get in an amendment like this—

Mr. GORDON. Would my friend yield?

Mr. EHLERS [continuing]. And I would like to wrap this up. I think we can head for a vote. I'll yield very briefly.

Mr. GORDON. Well, we submitted all these things to the majority staff some time ago. It seemed to be satisfactory at that time. Now, it may not be satisfactory now, but if you have an amendment to perfect this, then certainly introduce it, but the staff—and I understood the Chairman was satisfied that those contingencies that were put in this bill met those concerns.

Mr. EHLERS. Reclaiming my time. If I were to offer an amendment, I would simply express my faith in the Chairman to resolve this and urge him to do it as speedily as possible, which I am sure he will do.

Chairman SENSENBRENNER. Will the gentleman yield?

Mr. EHLERS. I'd be pleased to.

Chairman SENSENBRENNER. That's the Chairman's intent to resolve this, but we do want to get a bill down for the appropriators to consider, and the issues that are contained in this bill are much larger than the fate of the SNS.

Mr. EHLERS. I yield back the balance of my time.

Chairman SENSENBRENNER. For what purpose does the gentleman from Pennsylvania, Mr. Doyle, seek recognition?

Mr. DOYLE. I move to strike the last word.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. DOYLE. Thank you, Mr. Chairman, and I will be brief.

I just want to speak in support of Mr. Costello's amendment and to say that I think Mr. Costello has made some very good faith efforts here to accommodate some of the concerns of the Committee, to find offsets, and that this amendment deserves the support of the Committee, and, with that, Mr. Chairman, would yield back the balance of my time.

Chairman SENSENBRENNER. For what purpose does the gentleman from Illinois, Mrs. Biggert, seek recognition?



Mrs. BIGGERT. I move to strike the last word.

Chairman SENSENBRENNER. The gentlewoman is recognized for five minutes.

Mrs. BIGGERT. Thank you, Mr. Chairman. I have a great deal of respect of confidence in both the Chairman and the Project Director, David Moncton, and I'm confident that a solution will be reached.

But, as I understand it, the importance of the project has never been questioned. What appears to be at issue is the timing and the ability of the project managers to move forward with the next phase of the project. I have known Dr. Moncton for a long time when he was involved with the Advanced Photon Source at Argon, and he is the most highly respected scientist that I have known for a long time and did deliver the \$811 million advanced photon source project at Argonne on time and under budget.

My fear is that the longer we delay, the less likelihood that this project will go forward. I think that there is the—that with this delay, it is unlikely that the most talented that have been approached or have been hired for this project will remain. I think that even the recruitment of qualified technical and management people is in jeopardy. So, I would hope that we can come to consensus soon.

I do intend to vote with the Chairman, but hopeful that a deal can be reached before this bill comes to the Floor. I don't think we want to see the loss of this expertise, which, to me, spells the end of the project. I know that the Chairman has a strong sense that there are some aspects that SNS aren't really ready to move, but I think that it can be worked out and reach an agreement.

Mr. COSTELLO. I would ask the gentlelady, my friend from Illinois, to yield?

Mrs. BIGGERT. Yes, I'll yield.

Mr. COSTELLO. Mr. Chairman, I think it should be understood by members of this Committee that we all have great respect for Dr. Moncton. My friend from Illinois has just stated what he has done, and I know you have respect for him as well.

Dr. Moncton clearly has said to me and I believe to the Chairman of the Committee that if he does not get \$150 million minimum, is his level, to move forward with construction, many of the professionals that have already been recruited for the Spallation project—they have moved their families from locations around the country to the Oak Ridge, Tennessee to work on this project—will get pink slips this summer. They, in fact, will be lost. Now, if we come back a year from now and decide that we want to move forward with spallation, it is very doubtful that any of the people who will be let go—the professionals on this project—can be recruited to come back and work on spallation, let alone try and go out and recruit others on a project where their colleagues have relocated their families to Tennessee only to get a pink slip and then later to start the project up.

Lastly, if we are going to delay this project, what we're going to do is add on to the cost of the project. So, I would just ask the Chairman that if, in fact, we all support the Spallation project, that we support this amendment, an amendment that says that money cannot be spent and will not be spent on the project without trig-

gers and safeguards, and that is my intention and I think the intention of all of the members of this committee, including the Chairman.

With that, I thank my friend from Illinois for yielding.

Mr. HALL. Would the gentleman yield? Gentlelady yield?

Mrs. BIGGERT. Yes.

Mr. HALL. You know, I've always looked at these votes just like the old storekeeper who said he ignored the impossible and cooperated with the inevitable. I believe that we're going to get outvoted, and I believe that the Chairman will give you his word that he'll work this project out with you before conference. Is there a time element in there that precludes that?

GORDON. Mr. Chairman, I would like to know what is that vehicle to do so? I mean, we can have all the good will in the world, but if you can't give—

Mr. HALL. Well, the vehicle would be the Chairman's word that he was going to work this out; that he likes this amendment; that he has some problems with it, but he'll work it out with you. I'd rather not lose this amendment; I see the importance of it, and I think there are a lot of folks over on the chairman's side of the docket that really want to vote for this amendment, but out of respect for the Chairman, they're not going to. So, we might as well be realistic. If we want to lose this—I think it would hurt the project more to have a negative vote than it would to have a—

Chairman SENSENBRENNER. The time of the gentlewoman has expired.

Mr. GORDON. I'd like to ask unanimous consent that the Chairman be given the opportunity to explain to us what is this vehicle? What are these future opportunities where this can be cleaned up added? I just simply don't know what they are.

Chairman SENSENBRENNER. Well, anybody want to yield me time? I've already spoken once.

For what purpose does the gentleman from California seek recognition?

Mr. KUYKENDALL. Strike the last word.

Chairman SENSENBRENNER. The gentleman from California, Mr. Kuykendall, is recognized for five minutes.

Let me say, gentleman from Tennessee, I probably have spent more time working on this project than on any other issue under the Science Committee's authorization this year, and I am sincere in stating that I want to see the SNS built; I believe it has scientific merit, and I also support building it in Tennessee where it has been sited by the Department of Energy. However, with a GAO report and an internal DOE consultant's report talking about these terrible management problems and the fact that they are way behind in putting together their baseline, I think it is important, if we believe in doing oversight in this Congress and making the oversight improve the functions of Government, that we make those kinds of decisions stick.

Now, this entire debate would have been unnecessary had DOE come in with its initial deadline of January 1 in coming up with the baseline for the construction of this project. They missed that deadline, and I guess one of the reasons why the former Project Director was fired—kicked upstairs to be Deputy Director of Oak

Ridge is because he did miss a deadline, and he put a lot of people on the payroll down there, and there was no output in terms of putting together the budget.

I believe that Secretary Richardson did the right thing in naming Mr. Moncton who I believe is the best project manager within the DOE for building expensive projects, and his track record is extremely admirable. He has told me that there will be a baseline that will come in by the 12th of July. I would hope that he would be able to do that, and, as you all know, this is the first step in a very long process in sending the bill to the Floor.

I will spend as much time as is necessary to attempt to work these matters out before this bill and the appropriations bill come to the Floor, and I give everybody my word that I will do that. On the other hand, as I have said and the gentleman from Michigan, Mr. Ehlers, has said, the conditions that are contained in the Costello amendment are satisfied if the DOE sends us this information, whether it's good and believable and well thought out information or whether it's terrible information, and if it's terrible information, this project is going to be defunded by Congress sooner or later just like what happened when the DOE kept on sending us bad information on the Super Collider. I don't want that to be this Committee's record.

I want to make sure that we build this thing in a professional manner on time and on budget, and, so far, the DOE has given me no information to the effect that they are going to be able to do that. My faith in them was increased when Mr. Moncton was appointed, but Mr. Moncton has not had the time to come up with some better information than his predecessor—who ended up becoming Deputy Director of Oak Ridge—was able to do on his watch. So, we should have a little more time to allow the DOE to do this.

I want to move the bill ahead, but, certainly, I think that if the Costello amendment is voted down, the DOE knows that it has its work cut out for it to come up with these answers pretty quickly. If the Costello amendment is adopted, exactly the opposite message is given to the DOE saying that they can goof up on their management; they can admit to goofing up on their management, but when all else fails, they can come and roll to Congress, and that's, I don't think, what we want to see happen.

And I thank the gentleman from California for yielding.

Ms. WOOLSEY. Mr. Chairman?

Chairman SENSENBRENNER. For what purpose does the gentleman from California, Ms. Woolsey, seek recognition?

Ms. WOOLSEY. I move to strike the last word.

Chairman SENSENBRENNER. The gentlewoman's recognized for five minutes.

Ms. WOOLSEY. And I will yield time to Mr. Costello.

Mr. COSTELLO. I thank the gentlelady for yielding.

Mr. Chairman, again, I think we're trying to accomplish the same goal here, and I'm wondering if the Chairman would accept my amendment with the understanding and a pledge from the minority—since we are all attempting to do the same thing—to improve the amendment by the time we go to the Floor. Accept it here with the understanding that we will work with you, and any reasonable condition that you place—

Chairman SENSENBRENNER. If the gentlewoman from California will yield. I would ask the gentleman to withdraw his amendment, because that puts more pressure on DOE to come up with the answers that we all want to have.

Mr. COSTELLO. Well, it seems to me that we have to send a signal to the appropriations that the Spallation project is an important project, at least for some of us on this Committee.

Chairman SENSENBRENNER. Well, if the gentleman will yield, a properly managed—

Ms. WOOLSEY. It's my time.

Chairman SENSENBRENNER [continuing]. Spallation project I think is important to all of us. The question is not whether or not the project is necessary. I think everybody in this room agrees that it's necessary. The question is how we best can force the DOE to clean up its act.

Now, I pointed out to you that 2 years ago when we marked up a similar bill, I proposed defunding the American contribution to the Large Hadron Collider in Cern. That got the attention of the DOE and the high energy physics community. I went to Cern at my own expense, I might add—negotiated out with them an improvement to the intergovernment agreement, which has worked out extremely well. I'd ask you to give me a little bit of credit for the track record that I had on the other project in terms of working this thing out, but the burden's on the DOE.

I don't think we, as a Committee, should draft memorandums of agreement to give Mr. Moncton the authority to manage the project with respect to the employees at the other labs; that's DOE's job, but telling them that until this is done they aren't going to get any money, I think is going to make sure that it's done a lot better way than the way that you proposed in your amendment.

Mr. COSTELLO. Mr. Chairman, would the gentlelady yield?

Ms. WOOLSEY. Yes.

Mr. COSTELLO. Are you yielding to me?

Ms. WOOLSEY. I'm yielding to you and then to Bart Gordon.

Mr. COSTELLO. Let me say, Mr. Chairman, that I give you a great deal of credit for bringing us to the point that we are today, and I believe that every step of the way that we have agreed with you as far as the management and the triggers that need to be in place. My concern, again, is if we leave this Committee having zero line item in for construction of the Spallation project that we, in fact, will kill the project, and the intent of the members of this Committee and the Chairman is to move the project forward properly managed, and I suggest that my amendment would do that, and if we need to strengthen the triggers, we certainly are pledged to working with you to do that.

Ms. WOOLSEY. And I will yield to Mr. Gordon.

Mr. GORDON. Thank you. I want to concur with all the accolades that are presented to the Chairman in terms of his understand of this issue and how we are at a better point now, but I have to go back to, I think, two people seeing this accident different ways. Mr. Chairman, you asked us for offsets, we provided offsets. you said that it shouldn't be—Tennessee should not be given a windfall, even though it's being done at five different labs, and you didn't want Ways and Means to have joint jurisdiction. So, you have a let-

ter from the Governor, from the Speaker of the House and Senate saying that federal taxpayer—they'll introduce whatever legislation is necessary—

Mr. GORDON. But you say, let's put more pressure on DOE. The fact of the matter is, there is a process now to answer all of your questions by the end of June, which then they will sign off on. And you can sign off on the first of July.

You know, they can't do it any faster than that. They can't do it any differently than that. I mean, all of that is in this bill. So, I mean, what you have asked for is what you have been provided.

You know, we are going to have to have a vote here because—and the vote is going to be on whether you want to zero out this project or whether you want to go forward with the project. I mean, there is nothing else that can be added.

Mrs. MORELLA. Mr. Chairman.

Chairman SENSENBRENNER. The time of the gentlewoman from California has expired right now.

Mrs. MORELLA. Mr. Chairman.

Chairman SENSENBRENNER. For what purpose does the gentlewoman from Maryland—

Mrs. MORELLA. To strike the last word, Mr. Chairman.

Chairman SENSENBRENNER. The gentlewoman is recognized for five minutes.

Mrs. MORELLA. In listening to this debate, my friends, I think maybe the solution might be report language. And so I have just had prepared report language which indicates—I will offer it at the appropriate time. But basically, the thrust of it is to indicate we all believe that the Spallation Neutron Source is good and for all of the various reasons in terms of our nation's research enterprise that should be built in Tennessee. And that the Committee believes that the project in the national interest provided there are various management and cost issues that are addressed prior to commencing construction.

so it also leaves an opening that it could be within this piece of legislation or in separate authorization. I just want—

Chairman SENSENBRENNER. Will the gentlewoman yield?

Mrs. MORELLA. Yes.

Chairman SENSENBRENNER. You know, that certainly expresses my sentiments, and I would support the inclusion of that report language when it is offered at the proper time.

Mrs. MORELLA. The proper time, yes. Thank you.

Mr. BARTON. Will the gentlelady yield, gentlelady from Maryland?

Mrs. MORELLA. Yes.

Mr. BARTON. I want to thank the gentlelady for that effort. I want to make a couple points. I think the Chairman has made a good-faith promise that if the amendment is withdrawn he will work together to work this out. I want to add to that.

I will vote with Mr. Costello if this comes to a vote today for it. I would hope that he would withdraw it, take the Chairman's word that he will work on it. And I will work in a positive way to make this happen. If we can't work out an accommodation that is acceptable to the majority and minority, I will work with whoever wants to support the project when it goes to the floor.

I mean, I think we need to commit the basic research. That is what this committee is all about. But what we have got here is food fight. Everybody says they are for the project, but neither side is willing to back down right now.

Well, the gentlelady from Maryland has made a good-faith effort. I will help her. I will help anybody. But I don't think we can continue to say next year, next year, next year. If this committee is serious about DOE management, let's hold a hearing on DOE management.

Let's reform the Department of Energy, but let's don't kill this project to make that happen. And I yield back to the gentlelady from Maryland.

Mrs. MORELLA. I thank the gentleman from Texas.

Chairman SENSENBRENNER. For what purpose does the gentleman from South Carolina seek recognition?

Mr. SANFORD. I was—to move to strike the last word.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. SANFORD. I just want to pick up on the food fight comment. It seems to me that we are at an impasse. If the author of this amendment is not going to accept Mrs. Morella's language, I would simply call the question.

Mr. HALL. Will the gentleman yield? If you are pretty close to the Chairman, I wish you would reach over and ask him, in the event we have the vote and the vote is voted down, would he still consider Mrs. Morella's amendment?

Chairman SENSENBRENNER. Will the gentleman from South Carolina yield?

Mr. SANFORD. Yes.

Chairman SENSENBRENNER. Absolutely. You know, I have told Mrs. Morella that I would support the report language. And I believe I told Mr. Costello, more than once, that I will spend whatever time is necessary working with him and with the DOE to work out these management problems. But I do think we ought to have a budget before authorizing construction.

That is my principal complaint.

Mr. COSTELLO. Will the Chairman yield?

Chairman SENSENBRENNER. I yield back the balance of his time.

Okay. The question is on the amendment offered by the gentleman from Illinois, Mr. Costello.

Those in favor will say aye.

Opposed, no.

The noes appear to have it.

Mr. COSTELLO. Mr. Chairman, I reluctantly ask for recorded vote and I hope that we in fact can work this out at a later date.

Chairman SENSENBRENNER. A recorded vote is ordered. Those in favor of the Costello amendment will signify by saying aye. Those opposed, no. And the clerk will call the roll.

The CLERK. Mr. Sensenbrenner.

Chairman SENSENBRENNER. No.

The CLERK. Mr. Sensenbrenner votes no. Mr. Boehlert.

[No response.]

The CLERK. Mr. Smith.

[No response.]

The CLERK. Mrs. Morella.  
 Mrs. MORELLA. No.  
 The CLERK. Mrs. Morella votes no. Mr. Weldon.  
 [No response.]  
 The CLERK. Mr. Rohrabacher  
 Mr. ROHRABACHER. No.  
 The CLERK. Mr. Rohrabacher votes no. Mr. Barton.  
 Mr. BARTON. Aye.  
 The CLERK. Mr. Barton votes yes. Mr. Calvert.  
 Mr. CALVERT. No.  
 The CLERK. Mr. Calvert votes no. Mr. Smith.  
 Mr. SMITH of Michigan. Yes.  
 The CLERK. Mr. Smith votes yes. Mr. Bartlett.  
 Chairman SENSENBRENNER. The clerk will report Mr. Smith as  
 not voting.  
 The CLERK. Yes, sir. Mr. Bartlett.  
 [No response.]  
 The CLERK. Mr. Ehlers.  
 Mr. EHLERS. No.  
 The CLERK. Mr. Ehlers votes no. Mr. Weldon.  
 Mr. WELDON of Florida. No.  
 The CLERK. Mr. Weldon votes no. Mr. Gutknecht.  
 Mr. GUTKNECHT. No.  
 The CLERK. Mr. Gutknecht votes no. Mr. Ewing.  
 [No response.]  
 The CLERK. Mr. Cannon.  
 Mr. CANNON. No.  
 The CLERK. Mr. Cannon votes no. Mr. Brady.  
 Mr. BRADY. No.  
 The CLERK. Mr. Brady votes no. Mr. Cook.  
 Mr. COOK. No.  
 The CLERK. Mr. Cook votes no. Mr. Nethercutt.  
 Mr. NETHERCUTT. No.  
 The CLERK. Mr. Nethercutt votes no. Mr. Lucas.  
 Mr. LUCAS. No.  
 The CLERK. Mr. Lucas votes no. Mr. Green.  
 Mr. GREEN. No.  
 The CLERK. Mr. Green votes no. Mr. Kuykendall.  
 Mr. KUYKENDALL. No.  
 The CLERK. Mr. Kuykendall votes no. Mr. Miller.  
 Mr. MILLER. No.  
 The CLERK. Mr. Miller votes no. Mrs. Biggert.  
 Mrs. BIGGERT. No.  
 The CLERK. Mrs. Biggert votes no. Mr. Sanford.  
 Mr. SANFORD. No.  
 The CLERK. Mr. Sanford votes no. Mr. Metcalf.  
 [No response.]  
 The CLERK. Mr. Brown.  
 [No response.]  
 The CLERK. Mr. Hall.  
 Mr. HALL. Aye.  
 The CLERK. Mr. Hall votes yes. Mr. Gordon.  
 Mr. GORDON. Yes.  
 The CLERK. Mr. Gordon votes yes. Mr. Costello.

Mr. COSTELLO. Yes.  
 The CLERK. Mr. Costello votes yes. Mr. Barcia.  
 Mr. BARCIA. Yes.  
 The CLERK. Mr. Barcia votes yes. Ms. Johnson.  
 Ms. JOHNSON. Yes.  
 The CLERK. Ms. Johnson votes yes. Ms. Woolsey.  
 Ms. WOOLSEY. Yes.  
 The CLERK. Ms. Woolsey votes yes. Ms. Rivers.  
 Ms. RIVERS. Yes.  
 The CLERK. Ms. Rivers votes yes. Ms. Lofgren.  
 [No response.]  
 The CLERK. Mr. Doyle.  
 Mr. DOYLE. Yes.  
 The CLERK. Mr. Doyle votes yes. Ms. Jackson Lee.  
 [No response.]  
 The CLERK. Ms. Stabenow.  
 Ms. STABENOW. Yes.  
 The CLERK. Ms. Stabenow votes yes. Mr. Etheridge.  
 Mr. ETHERIDGE. Yes.  
 The CLERK. Mr. Etheridge votes yes. Mr. Lampson.  
 [No response.]  
 The CLERK. Mr. Larson.  
 Mr. LARSON. Yes.  
 The CLERK. Mr. Larson votes yes. Mr. Udall.  
 Mr. UDALL. Yes.  
 The CLERK. Mr. Udall votes yes. Mr. Wu.  
 Mr. WU. Yes.  
 The CLERK. Mr. Wu votes yes, Mr. Weiner.  
 Mr. WEINER. Aye.  
 The CLERK. Mr. Weiner votes yes. Mr. Capuano.  
 Mr. CAPUANO. Yes.  
 The CLERK. Mr. Capuano votes yes.  
 Chairman SENSENBRENNER. Are there additional members in the chamber who wish to cast their vote or change their vote.  
 The gentleman from Texas, Mr. Lampson.  
 Mr. LAMPSON. Yes. How am I recorded?  
 The CLERK. Mr. Lampson is not recorded.  
 Mr. LAMPSON. Then I vote yes.  
 The CLERK. Mr. Lampson votes yes.  
 Chairman SENSENBRENNER. Any members in the chamber who wish to change their vote?  
 If not, the clerk will report.  
 The CLERK. Mr. Chairman, 17 yes and 17 no.  
 Chairman SENSENBRENNER. And the amendment is not agreed to.



COMMITTEE ON SCIENCE - ROLL CALL - 106<sup>th</sup> CONGRESSDATE: 5-25-99 SUBJECT: HR 1655: amendment #7 Mr. Costello

Rm.	Phone	Member	Yes	No	Not Voting	Present	Absent
2332	55101	Mr. Sensenbrenner, R-WI		1			
2246	53665	Mr. Boehlert, R-NY					
2231	54236	Mr. Lamar Smith, R-TX					
2228	55341	Mrs. Morella, R-MD		2			
2452	52011	Mr. Curt Weldon, R-PA					
2338	52415	Mr. Rohrabacher, R-CA		3			
2264	52002	Mr. Barton, R-TX	1				
2201	51986	Mr. Calvert, R-CA		4			
306	56276	Mr. Nick Smith, R-MI			-		
2412	52721	Mr. Bartlett, R-MD					
1714	53831	Mr. Ehlers, R-MI		5			
332	53671	Mr. Dave Weldon, R-FL		6			
425	52472	Mr. Gutknecht, R-MN		7			
2417	52371	Mr. Ewing, R-IL					
118	57751	Mr. Cannon, R-UT		8			
1531	54901	Mr. Brady, R-TX		9			
1431	53011	Mr. Cook, R-UT		10			
1527	52006	Mr. Nethercutt, R-WA		11			
438	55565	Mr. Lucas, R-OK		12			
1218	55665	Mr. Green, R-WI		13			
512	58220	Mr. Kuykendall, R-CA		14			
1037	53201	Mr. Miller, R-CA		15			
508	53515	Mrs. Biggert, R-IL		16			
1233	53176	Mr. Sanford, R-SC		17			
1510	52605	Mr. Metcalf, R-WA					
2300	56161	Mr. Brown, D-CA					
2221	56673	Mr. Hall, D-TX	2				
2368	54231	Mr. Gordon, D-TN	3				
2454	55661	Mr. Costello, D-IL	4				
2419	58171	Mr. Barcia, D-MI	5				
1511	58885	Ms. Johnson, D-TX	6				
439	55161	Ms. Woolsey, D-CA	7				
1724	56261	Ms. Rivers, D-MI	8				
318	53072	Ms. Lofgren, D-CA					
133	52135	Mr. Doyle, D-PA	9				
410	53816	Ms. Jackson-Lee, D-TX					
1039	54872	Ms. Stabenow, D-MI	10				
1641	54531	Mr. Etheridge, D-NC	11				
417	56565	Mr. Lampson, D-TX	17				
1419	52265	Mr. Larson, D-CT	12				
128	52161	Mr. Udall, D-CO	13				
510	50855	Mr. Wu, D-OR	14				
501	56616	Mr. Weiner, D-NY	15				
1232	55111	Mr. Capuano, D-MA	16				
TOTAL			17	17			

Attest: Patricia Schwartz (Clerk)

Chairman SENSENBRENNER. The chair is about ready to declare a recess for lunch. I would ask the members to come back at 2 o'clock. We are going to finish the bills that are on the agenda today, I think we have done most of the heavy lifting. There will be a couple of controversial amendments, but I think that the most controversial issues have been resolved.

So the Committee stands in recess until 2:00 o'clock. Members please be prompt.

[Whereupon, at 12:40 p.m., the Committee recessed, to reconvene at 2:00 p.m., the same day.]

#### AFTERNOON SESSION

Chairman SENSENBRENNER. The Committee on Science will be in order.

When the Committee recessed before lunch, we had completed this first eight amendments on the amendment roster and the bill H.R. 1655, the Department of Energy Research, Development, and Demonstration Authorization Act of 1999.

The next amendment on the roster is one by the gentlewoman from Illinois, Mrs. Biggert. For what purpose does she seek recognition?

Mrs. BIGGERT. Thank you, Mr. Chairman. I have an amendment at the desk.

Chairman SENSENBRENNER. The clerk will report the amendment.

The CLERK. Amendment to H.R. 1655 offered by Mrs. Biggert. Page 28—

Chairman SENSENBRENNER. Without objection, the amendment is considered as read. And the gentlewoman is recognized for five minutes.

[The information follows:]

Page 28, after line 15, insert the following new section:

#### SEC. 15. INTERNET AVAILABILITY OF INFORMATION.

The Secretary shall make available through the Internet home page of the Department the abstracts relating to all research grants and awards made with funds authorized by this Act. Nothing in this section shall be construed to require or permit the release of any information prohibited by law or regulation from being released to the public.

Mrs. BIGGERT. Thank you, Mr. Chairman. The amendment I offer today would require DOE to make available on the Internet all abstracts relating to research grants and awards with funds authorized by the bill. And currently, DOE has a web site that contains grant abstracts with the descriptions of the research being done. However, the information is difficult to find. It is not centrally located or accessible from DOE's home page.

Instead, the information is organized by DOE office and various bits of information can only be located through a search of the entire web site. So this would put it all together.

I think this is a good government amendment, it will allow the public to more easily access and understand research funded by the Federal Government.

And I ask my colleagues for their support.

Chairman SENSENBRENNER. Further discussion on the Biggert amendment?

[No response.]

Hearing none, all those in favor of the amendment will signify by saying aye.

Oppose, no.

The ayes appear to have it. The ayes have it. And the amendment is agreed to.

Mr. Nethercutt was in the vicinity. He is next.

[Pause.]

Mr. Nethercutt around.

Costollo amendment is the substitute for the Nethercutt amendment. So——

Mr. COSTELLO. Mr. Chairman, I have an amendment that I intended to offer to Mr. Nethercutt's amendment. If you would like for me to proceed——

Chairman SENSENBRENNER. No. I think that if Mr.—here he is.

For what purpose does the gentleman from Washington seek recognition?

Mr. NETHERCUTT. Mr. Chairman, I have an amendment at the desk.

Chairman SENSENBRENNER. The clerk will report the amendment.

The CLERK. Amendment to H.R. 1655, offered by Mr. Nethercutt.

Chairman SENSENBRENNER. Without objection, the amendment is considered as read, and the gentleman from Washington is recognized for five minutes to explain his amendment.

[The information follows:]

Page 28, after line 15, insert the following new section:

**SEC. 15. FOREIGN VISITORS PROGRAM.**

(a) PROHIBITION.—Except as provided in subsection (b) or (c), the Secretary may not admit to any classified area of any federally owned or operated nonmilitary energy laboratory any individual who is a citizen of a nation that is named on the Department of Energy List of Sensitive Countries.

(b) WAIVER AUTHORITY.—(1) The Secretary may waive the prohibition in subsection (a) on a case-by-case basis with respect to individuals whose admission to a federally owned or operated nonmilitary energy laboratory is determined by the Secretary to be necessary for the furtherance of civilian science interests of the United States.

(2) Not later than 30 days after granting a waiver under paragraph (1), the Secretary shall transmit to the Committee on Science of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report in writing providing notice of the waiver. The report shall identify each individual for whom a waiver is granted and, with respect to each such individual, provide a detailed justification for the waiver and the Secretary's certification that the admission of that individual to a federally owned or operated nonmilitary energy laboratory is necessary for the furtherance of civilian science interests of the United States.

(3) The authority of the Secretary under paragraph (1) may not be delegated.

(c) APPLICATION.—This section shall not apply to the Ames Laboratory, the Environmental Measurement Laboratory, the Ernest Orlando Lawrence Berkeley National Laboratory, the Federal Energy Technology Center, the Fermi National Accelerator Laboratory, the National Renewable Energy Laboratory, the Princeton Plasma Physics Laboratory, the Radiological and Environmental Sciences Laboratory, the Stanford Linear Accelerator Center, or the Thomas Jefferson National Accelerator Facility.

Mr. NETHERCUTT. Thank you, Mr. Chairman.

This amendment prohibits the admittance to any federally-owned or -operated non-military energy laboratory of any citizen from a country named on the DOE list of sensitive countries. Sensitive

countries are listed, quote, “for reasons of national security, terrorism, or nuclear non-proliferation support,” close quote.

And I think there will be broad agreement on this amendment that we should limit access to lab facilities for these individuals. Waiver authority is granted in the amendment to the Secretary on a case-by-case basis to permit admission to labs if notice is made to Congress.

The amendment specifies that the civilian labs that do not conduct national-security-related work are excluded from this moratorium. This committee does not have direct oversight over the lax security at DOE weapons lab facilities that are the subject of the news reports, almost daily now—we are finding out each and every day about security problems there.

But we do have jurisdiction over all civilian Department of Energy lab work. In fact, over \$250 million annually in DOE defense program funds flows to civilian labs under the jurisdiction of our Science Committee.

Ten of our civilian labs conduct no classified work and are therefore unlikely targets of foreign espionage. But another 10 civilian labs do have a wide range of classified work, ranging from 3 percent to a hundred percent national security related.

I am concerned that as the story of espionage and loose security unfolds, it will become apparent that problems extend far beyond the weapons labs. If the design secrets for nuclear warheads are at risk at our most secure labs, the potential for espionage at the non-military labs is vast.

My amendment forces the Secretary of Energy to be accountable for security at his facilities. And I think it is a good thing that Secretary Richardson announced recently of a security czar in the broad cyber-security initiatives that he has announced.

These are good measures, but it is apparent that statutory changes are needed to correct this problem. I also do not believe that we can ignore our responsibility to send a message of concern about this issue as the committee of jurisdiction, nor can we wait for DOE initiatives to take hold.

As the Committee learned in last week’s testimony, it took the Administration three years from learning of Wen Ho Lee’s activities to actually implement recommended security guidelines blocking data transfer from classified computers.

I have worked to address numerous concerns in drafting this amendment.

Mr. Chairman, I understand your interest in avoiding cross-referrals of H.R. 1655. So I have authored a very narrow bill to avoid triggering such referrals. I have limited the burdens on DOE by dropping a requirement for background checks for all foreign visitors at civilian labs, although I would be willing to entertain that proposal, if we could provide the agency with some additional funding.

We have dropped prior congressional approvals of waivers to address concerns about adherence to treaty obligations. I have limited the scope of the amendment to only those labs which conduct some aspect of classified work, recognizing that such facilities as the Environmental Measurement Lab do not likely have much of an espionage threat.

And I included language suggested by Mr. Ehlers which will further clarify that our concern is the classified work at these labs.

With a waiver, Mr. Chairman, all existing lab programs can continue, and cooperative exchanges with foreign states can continue as well.

This amendment merely codifies what should have already been law and makes the Secretary personally responsible for the security of these facilities.

I don't want this amendment to be misunderstood or misinterpreted either, Mr. Chairman. This doesn't strike out or emphasize the background, the ethnic background, or the country of origin for people who are citizens of this country. We have some fine people who have come here from other countries who have become naturalized citizens who are working throughout our country with high distinction.

So this is not aimed at them. This is aimed at just an extra measure of verification. And, you know, we want to trust but verify that our classified activity at these labs, non-weapons labs, are protected and secured. And this is a way to do it.

I think it is a good amendment. I hope the Chairman and others on this committee will support it.

And I yield back my time.

Chairman SENSENBRENNER. For what purpose does the gentleman from Illinois seek recognition?

Mr. COSTELLO. Mr. Chairman, I have an amendment at the desk to the amendment offered by Mr. Nethercutt.

Mr. CALVERT. Mr. Chairman, I reluctantly reserve a point of order against the Costello amendment in that it is not germane to the bill and it could subject the—

Chairman SENSENBRENNER. Point of order is reserved. The clerk will report the amendment.

The CLERK. Substitute amendment offered by Mr. Costello to the amendment offered by Mr. Nethercutt—

Chairman SENSENBRENNER. Without objection, the amendment is considered as read. And the gentleman from Illinois is recognized for five minutes.

[The information follows:]

Page 28, after line 15, insert the following new section:

**SEC. 15. MORATORIUM ON FOREIGN VISITORS PROGRAM.**

(a) MORATORIUM.—Until the appropriate conditions are met under subsection (c), the Secretary may not admit any individual who is a citizen of a nation that is named on the current Department of Energy List of Sensitive Countries to—

(1) any classified facility of a laboratory owned by the Department; or

(2) any facility of a laboratory owned by the Department for the purposes of conducting activities related to any of the sensitive subjects listed in part 1 of Appendix 4 of the February 1997 document entitled "Guidelines on Export Control and Nonproliferation", issued by the Nuclear Transfer and Supplier Policy Division of the Office of Arms Control and Nonproliferation of the Office of Nonproliferation and National Security of the Department.

(b) WAIVER AUTHORITY.—(1) The Secretary may waive the prohibition in subsection (a) on a case-by-case basis with respect to specific individuals whose admission to a laboratory owned by the Department is determined by the Secretary to be necessary for the national security of the United States.

(2) Not later than 30 days after granting a waiver under paragraph (1), the Secretary shall transmit to the committees described in subsection (e) a report in writing regarding the waiver. The report shall identify each individual for whom such a waiver is granted and, with respect to each such individual, provide a detailed

justification for the waiver and the Secretary's certification that the admission of that individual to a laboratory owned by the Department is necessary for the national security of the United States.

(3) The authority of the Secretary under paragraph (1) may not be delegated.

(c) **CONDITIONS FOR LIFTING MORATORIUM.**—The moratorium on a laboratory owned by the Department shall be lifted when the Secretary, in consultation with and with the concurrence of the Director of the Federal Bureau of Investigation, transmits to the Congress a report certifying that—

(1) all of the applicable counterintelligence and safeguards and security measures contained in Presidential Decision Directive 61 have been fully implemented at the laboratory, and that adequate oversight and resources exist to ensure that they are properly followed;

(2) all of the additional applicable counterintelligence and safeguards and security measures announced by the Secretary on March 17, 1999, and March 31, 1999, have been fully implemented at the laboratory, and that adequate oversight and resources exist to ensure that they are appropriately followed; and

(3) all of the guidelines in February 1997 document entitled "Guidelines on Export Control and Nonproliferation", issued by the Nuclear Transfer and Supplier Policy Division of the Office of Arms Control and Nonproliferation of the Office of Nonproliferation and National Security of the Department are being followed with respect to all activities at the laboratory.

(d) **REPORT TO CONGRESS.**—(1) The Director of the Federal Bureau of Investigation and the Secretary jointly shall transmit to the committees described in subsection (e) an annual report, the first of which shall be transmitted not later than 90 days after the date of the enactment of this Act, on counterintelligence and safeguards and security activities at the laboratories owned by the Department, including facilities and areas at those laboratories at which unclassified work is carried out.

(2) The report required by paragraph (1) shall include—

(A) a description of the status of counterintelligence and safeguards and security at each of the laboratories owned by the Department;

(B) a description of the status of the conditions for lifting the moratorium under subsection (c); and

(C) a net assessment of the foreign visitors program at the laboratories owned by the Department, prepared by a panel of individuals with expertise in intelligence, counterintelligence, and nuclear weapons design matters.

(e) **COMMITTEES.**—The Committees referred to in this section are the Committee on Armed Services, the Committee on Appropriations, the Committee on Commerce, Science, and Transportation, the Committee on Energy and National Resources, and the Select Committee on Intelligence of the Senate, and the Committee on Armed Services, the Committee on Appropriations, the Committee on Commerce, the Committee on Science, and the Permanent Select Committee on Intelligence of the House of Representatives.

Mr. COSTELLO. Mr. Chairman, thank you. Mr. Chairman, we have all been shocked and appalled by the lapses in security at DOE labs that have been reported in the press as well as by the apparent failure of various agencies to respond to these lapses in a timely manner.

I applaud the attempt of the gentleman from Washington to address these issues, but would seek to submit a substitute to his language for a version that I believe gets to the heart of the problem.

My amendment would call for a moratorium on foreign visitors from sensitive countries to all labs, but only in certain cases. When the visit is to be a classified facility or when the visit will directly involve topics that DOE's guidance on export control and non-proliferation deemed to be sensitive. This should exempt foreign visits relating to most basic science activities, which are activities that all of us on the Science Committee recognize to be invaluable to the health of our nation's scientific enterprise.

My amendment also recognizes that some of the visits, such as international treaty inspections, are visits related to the U.S.-Russia non-proliferation programs, and are important to national secu-

urity. And so I allow for a waiver of the moratorium to be made for national security purposes. Like the bipartisan bill passed by the Senate Intelligence Committee, the Secretary can issue waivers as long as he reports to Congress within 30 days of doing so.

But unlike all other legislation, my amendment contains a sunset to the moratorium. The rest of the legislation has it go on forever. My amendment would allow the moratorium to be lifted on a lab when the FBI and the DOE certify to Congress that three things have happened at the lab.

One, that all applicable portions of the counter-intelligence measures in Presidential Decision Directive 61 are in place. Two, that all additional counter-intelligence safeguards and security measures announced by Secretary Richardson are in place. And three, that DOE's current guidance on export controls and non-proliferation that govern foreign visits is in place at the lab.

So when the FBI and DOE certify that the security is tight enough, the lab can resume the foreign visits that were prohibited.

Finally, my amendment calls for an annual report to be submitted to Congress by DOE and the FBI that assesses the status of counter-intelligence safeguards and security at each lab.

Mr. Chairman, I believe my amendment is protective of national security, creates an incentive for quick implementation of all counter-intelligence and safeguards and security measures, and ensure FBI and Congressional oversight of security at the labs, all while ensuring that most foreign visits involving basic research and unclassified facilities will not be harmed.

I appreciate the consideration of my amendment to the Nethercutt amendment and ask my colleagues to support it.

Chairman SENSENBRENNER. The gentleman's time has expired.

Mr. CALVERT. Mr. Chairman.

Chairman SENSENBRENNER. Does the gentleman from California insist on his point of order?

Mr. CALVERT. Mr. Chairman, just to speak to the point of order.

Chairman SENSENBRENNER. You must make your point of order first. You just reserved it.

Mr. CALVERT. Mr. Chairman, I make my point of order.

Chairman SENSENBRENNER. And what is your point of order?

Mr. CALVERT. Mr. Chairman, the Costello amendment is not germane to the bill and would create the situation where this bill would be subject to referral to other committees. And unfortunately, even though I agree with this amendment, it would put us in a position not to have our bill in front of the appropriations process.

Chairman SENSENBRENNER. Does anybody else wish to be heard on the point of order?

The gentleman from Illinois.

Mr. COSTELLO. Mr. Chairman, I appreciate the opportunity to respond. And based on the objection by my friend from California, I agree to withdraw my amendment with the understanding—

Chairman SENSENBRENNER. The point of order will be sustained, and the question is on the adoption of the amendment offered by the gentleman from Washington, Mr. Nethercutt.

Those in favor will signify by saying aye.

Opposed, no.

The ayes appear to have it. The ayes have it. And the Nethercutt amendment is agreed to.

Are there further amendments to the bill?

The gentleman from Utah, Mr. Cook, for what purpose do you seek recognition?

Mr. COOK. I have an amendment at the desk.

Chairman SENSENBRENNER. The clerk will report the amendment.

The CLERK. Amendment to H.R. 1655, offered by Mr. Cook and Ms. Woolsey—

Chairman SENSENBRENNER. Without objection, the amendment is considered as read. The gentleman from Utah is recognized for five minutes.

[The information follows:]

Page 3, lines 22 through 24, amend subparagraph (I) to read as follows:

(I) \$33,500,000 for fiscal year 2000 and \$35,000,000 for fiscal year 2001 for Geothermal, of which \$4,000,000 for fiscal year 2000 and \$4,615,000 for fiscal year 2001 shall be derived from amounts otherwise authorized under this subsection, from savings resulting from reductions in contractor travel pursuant to section 9(f);

Mr. COOK. Thank you, Mr. Chairman. I would like to offer this amendment with Ms. Woolsey. I would also like to thank the Chairman, Ms. Woolsey, and the Committee staff for working with me on this amendment.

This amendment is similar to Ms. Woolsey's earlier amendment in that it would increase funding geothermal energy research and development programs by \$4 million in Fiscal Year 2000 for a total of 33 and a half million and for a total of \$35 million in Fiscal Year 2001.

This amendment would give limited funding to begin implementing the new strategic plan to develop enhanced geothermal production technologies. The Department of Energy produced this strategic plan in collaboration with National Laboratories, the University of Utah, and the geothermal industry.

Implementing the strategic plan will develop the technology to enhance the production from geothermal systems. The technology would be applicable to hundreds of sites throughout the United States.

A recent report, prepared by the Geothermal Energy Association in conjunction with the University of Utah and the Department of Energy, expects this research to yield in a threefold increase of domestic geothermal electricity production. The extra power will supply 18 million homes with electricity.

This amendment is different from Ms. Woolsey's earlier amendment in that it has offsets. It is paid for from savings resulting from reductions in contractor travel pursuant to Section 9(f) of H.R. 1655.

I think this is the correct way to pay for this program, rather than taking the money out of the Social Security Trust Fund. This amendment is not only fiscally responsible, it is environmentally responsible. It takes the savings from cleaning up the waste and inefficiencies in the contractor travel budget and uses them to fund research in clean, safe energy produced here in America.



This amendment will lead to cleaner air for our children and continue to protect Social Security for our parents.

Accelerating development of renewable resources is a good investment. We, in Congress, have a duty to spend the money taxed from the American people responsibly. This amendment does that.

Thank you, Mr. Chairman. I urge all my colleagues to support this amendment. And I yield back the balance of my time.

Chairman SENSENBRENNER. Further discussion on the Cook amendment?

For what purpose does the gentleman from Minnesota seek recognition?

Mr. GUTKNECHT. I would like to strike the last word—

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. GUTKNECHT. Mr. Chairman, Mr. Cook, I recognize this is not the Budget Committee, it's not the Appropriations Committee, but as I understand it, you are going to take \$4 million out of the—you are going to reduce in contractor travel. Is that correct?

Mr. COOK. That's right.

Mr. GUTKNECHT. Can you tell me, how much do we spend on contractor travel?

Mr. COOK. If the gentleman would yield, the—according to this General Accounting Office report, I think the—let me just, I can tell you that—well, I know that there is at least \$175 million that we could save over five years. So, I think the amounts are on the order of six and seven hundred million dollars.

But that relates to more than just the Department of Energy, I guess. DOE savings—well, the Department of Energy incurs hundreds of millions of dollars in travel costs each, each year. And although, in 1995, there was some attempt by Congress to do something significant, we feel that this Section 9(f), limiting that to 1 percent of the contracts is going to save as much as \$60 or \$70 million over a couple years.

Mr. GUTKNECHT. Well, Mr. Chairman and members, I don't hold myself as an expert in travel expenses, but this does seem to be outrageous in terms of the amount that this Department is spending on travel, and particularly for contractor travel. And as one member of the Budget Committee, I think we have at least one or two others who are members of this committee, I would hope that in coming years we take a much more careful look, line by line, at what's in these requests.

I will support your amendment, but I think it does raise the whole issue of how much we are spending, or some might even say wasting, on contractor travel.

Ms. WOOLSEY. Mr. Chairman.

Chairman SENSENBRENNER. Will the gentleman yield back?

Mr. GUTKNECHT. I yield back my time.

Chairman SENSENBRENNER. For what purpose does the gentleman from California seek recognition?

Ms. WOOLSEY. To strike the last word—

Chairman SENSENBRENNER. The gentlewoman is recognized for five minutes.

Ms. WOOLSEY. And to support Mr. Cook's offsets, and to thank him for bringing this forward because we are showing this wasn't

intended to start picking on the travel. It was intended to show that we could cut down in some areas in order to support some of the programs that we want to take forward.

And when we are talking about \$4 million each year or more for geothermal energy, then I think there is plenty of room in that offset to make that happen.

So I do support him, and I thank him for bringing this forward.

Mr. NETHERCUTT. Will the gentlelady yield?

Ms. WOOLSEY. Yes.

Mr. NETHERCUTT. I just want to thank the gentleman for offering a good amendment, and this is certainly a proper way to offset and to put together expenditures on a program that is worthwhile. So I thank the gentleman, and I thank the gentlelady for yielding.

Chairman SENSENBRENNER. The time of the gentleman has expired.

The question is on——

Mr. UDALL. Mr. Chairman. Mr. Chairman.

Chairman SENSENBRENNER. Who seeks recognition? The gentleman from Colorado, Mr. Udall.

Mr. UDALL. I move to strike the last word.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. UDALL. Thank you, Mr. Chairman. I will be brief.

I, too, rise in support of this amendment. I did, however, want to make the point that we have, I think earlier in the day, taken the position, or some of us in the Committee, that all amendments should be offset by funding reductions elsewhere. And my reading of the amendment is that the 4 million for Fiscal year 2000 and the 4.6 million for Fiscal year 2001 is not truly offset, despite the reference to travel cuts.

I think to constitute an offset, the amendment would have to reduce actual authorization levels elsewhere in the bill, and it doesn't as I read it.

We are talking about \$3.937 billion, and if you put this amendment in, it is going to be \$3.941. It might be an interesting exercise to ask the legislative counsel to give their opinion after we finish the final markup on the bill. But I do support what is going on here. I think it is very important to continue to promote renewable energy, but I think again we could go back to the debate we had earlier today about what is authorized and what is appropriated.

And in that spirit, I will support this amendment.

Chairman SENSENBRENNER. Will the gentleman yield?

Mr. UDALL. I certainly would.

Chairman SENSENBRENNER. The offsets will be reflected in the tables that will appear as a part of the Committee report.

The gentleman's time has expired.

Again, the question is on agreeing to the amendment offered by the gentleman from Utah, Mr. Cook.

Those in favor will signify by saying aye.

Oppose, no.

The ayes appear to have it. The ayes have it. And the amendment is agreed to.

Further amendments to the bill?

The gentleman from Tennessee, Mr. Gordon.

Mr. GORDON. Thank you, Mr. Chairman.  
I have an amendment at the desk.

Chairman SENSENBRENNER. The clerk will report the amendment.

The CLERK. Amendment to H.R. 1655, offered by Mr. Gordon—

Chairman SENSENBRENNER. Without objection, the amendment is considered as read. And the gentleman from Tennessee is recognized for five minutes.

[The information follows:]

Page 6, line 2, strike "\$2,557,761,000" and insert "\$2,657,761,000".

Page 9, line 3, strike "and".

Page 9, line 6, strike the period and insert "; and".

Page 9, after line 6, insert the following new paragraph:

(11) \$100,000,000 for fiscal year 2000 shall be for construction of Project 99-E-334, Spallation Neutron Source, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

Page 22, lines 11 through 15, amend subsection (c) to read as follows:

(c) CONSTRUCTION OF SPALLATION NEUTRON SOURCE PROJECT.—None of the funds authorized by section 3(b)(11) may be obligated until—

(1) the Secretary certifies in writing to the Committee on Science of the House of Representatives and the Committee on Energy and Natural Resources of the Senate that senior project management positions for the project have been filled by qualified individuals; and

(2) the Secretary provides the Committee on Science and the Committee on Appropriations of the House of Representatives, and the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate, with—

(A) a cost baseline and project milestones for each major construction and technical system activity, consistent with the overall cost and schedule submitted with the Department's fiscal year 2000 budget, that have been reviewed and certified by an independent entity, outside the Department and having no financial interest in the project, as the most cost-effective way to complete the project;

(B) binding legal agreements that specify the duties and obligations of each laboratory of the Department in carrying out the project;

(C) a revised project management structure that integrates the staff of the collaborating laboratories working on the project under a single project director, who shall have direct supervisory responsibility over the carrying out of the duties and obligations described in subparagraph (B); and

(D) official delegation by the Secretary of primary authority with respect to the project to the project director; and

(3) the Comptroller General certifies to the Congress that the total taxes and fees in any manner or form paid by the Federal Government on the Spallation Neutron Source and the property, activities, and income of the Department relating to the Spallation Neutron Source to the State of Tennessee or its counties, municipalities, or any other subdivision thereof, does not exceed the aggregate taxes and fees for which the Federal Government would be liable if the project were located in any other State that contains a national laboratory of the Department.

The Secretary shall report on the Spallation Neutron Source Project 99-E-334 annually, as part of the Department's annual budget submission, including a description of the achievement of milestones, a comparison of actual costs to estimated costs, and any changes in estimated project costs or schedule.

Page 24, after line 19, insert the following new subsection:

(h) REDUCTIONS.—Notwithstanding any other provision of this Act—

(1) each of the amounts authorized by this Act for fiscal year 2000 shall be reduced by 1 percent;

(2) each of the amounts authorized by this Act for fiscal year 2000, as reduced pursuant to paragraph (1), shall be further reduced by .7674 percent, with such reduction representing a reduction in travel costs; and

(3) each of the amounts authorized by this Act for fiscal year 2000 for administrative expenses, including program management, shall be further reduced proportionately to achieve additional savings of \$30,000,000.

Mr. GORDON. Thank you, Mr. Chairman. As the amendment is being handed out, let me just once again say that I think we had an important discussion this morning on the spallation project. The project is important. But we need to learn more about the benefits. We need to learn more about the problems.

And, as I have said all along, the Chairman has played a very constructive role in trying to make this project even better. And in the spirit of trying to continue to fine tune this effort, in consultation with the Chairman and the staff, we may, we have an amendment that I think will maybe pull all these pieces together.

The first thing it does is adds \$100 million for the spallation. Again, lower than it should be but at least we are making a statement to the appropriators that this a major project. This \$100 million is offset in this coming Fiscal Year. It is done by a variety of ways.

First is, there is a 1 percent, across-the-board reduction. Then there is a .74 percent reduction in travel. And then there is an additional \$300 million reduction in the Department's administrative expenses for a total of an agreed-up \$100 million.

In addition to that, It restates the various triggers that the Chairman has pointed out, rightfully so, that the Department needs to meet.

And finally, even though this project will be done by five different labs, we are going to codify here that the Comptroller General will certify that the Federal taxpayer will be no worse off by any portion of this project being in the State of Tennessee.

So I hope that we have been able to make a, you know, less than perfect bill closer to perfect. And, hopefully, we can have a better project here.

Chairman SENSENBRENNER. Will the gentleman yield?

Mr. GORDON. I yield to the Chairman. Oh, to Mr. Costello.

Chairman SENSENBRENNER. The gentleman from Illinois.

Mr. COSTELLO. I thank the gentleman for yielding. I rise in support of his amendment. And for all of the reasons that I stated earlier when I offered my amendment, I would hope that the Committee would approve this amendment so that we can move forward with the \$100 million in offsets that Mr. Gordon is offering, and also the same triggers that we talked about before so that the money cannot be spent until both DOE reaches the management level that we are all comfortable with and meets the guidelines that are in place by this committee.

And I yield back to Mr. Gordon.

Mrs. MORELLA. Mr. Chairman.

Chairman SENSENBRENNER. Does the gentleman from Tennessee yield back the balance of his time.

Mr. GORDON. I would yield to her.

Mrs. MORELLA. Thank you for yielding the time to me, Mr. Gordon.

I just want to indicate that I am very pleased with this amendment that we are going to build on, a bipartisan amendment. And, therefore, I don't feel it is necessary to offer the report language. It was so carefully crafted. It was so wonderful. Because I think this amendment takes care of it very nicely. [Laughter.]

Thank you. I yield back. Thank you for yielding.

Chairman SENSENBRENNER. Gentleman from Tennessee yield back the balance of his time.

Mr. GORDON. Yes I do.

Chairman SENSENBRENNER. The Chair strikes the last word and recognizes himself for five minutes.

I am prepared to support the amendment by the gentleman from Tennessee, which deals favorably with the concerns that I raised this morning with the earlier amendment that had been offered by Mr. Costello.

First the \$100 million authorization for Fiscal Year 2000 is fully offset with Fiscal Year 2000 offsets. Those Fiscal Year 2001 offsets as described by the gentleman from Tennessee but with the exception that the administrative expense reduction is \$30 million rather than \$300 million.

Mr. GORDON. Oh. Excuse me. Thank you.

Chairman SENSENBRENNER. Stated in case the Secretary of Energy just called 911—

[Laughter.]

Chairman SENSENBRENNER. To bring the paramedics over there to resuscitate him.

There are a number of strengthened protections to the taxpayers contained in this amendment which were not present in the Costello amendment. And I will tick them off one by one.

First, there is a requirement that DOE gets no funds until the Secretary certifies in writing to our committee, to the comparable committee in the Senate that the management, the senior project management positions, have been filled by qualified individuals. So they don't get any money until they have completed their hiring.

Second, the Secretary has to provide us, the comparable committee in the Senate, and in the appropriations committees in both Houses first a cost baseline and project milestones consistent with the overall cost and schedule submitted with the Department's Fiscal Year 2000 budget that had been reviewed and certified by an independent entity, which is outside the Department and has no financial interest in the project, as the most cost effective way to complete it.

Third, binding legal agreements that specify the duties and obligations of each lab of the Department in carrying on the project.

Fourth, a revised project management structure that integrates the staff of the collaborating laboratories working under the project under a single project direction, which means that Mr. Moncton will be the boss of this project, not just the boss of Oak Ridge, but the boss of the whole thing.

And finally, the official designation by the Secretary of the primary authority with respect to the project, the project director. So that means that Mr. Moncton would achieve his authority from the Secretary of Energy himself rather than anybody else in the Department, including the Director of Oak Ridge.

Finally, they don't get money until the Comptroller General certifies to the Congress that the total taxes and fees paid in any manner or form by the Federal Government on the SNS property to the State of Tennessee, its counties, its municipalities, or any other subdivision thereof, would not exceed the aggregate taxes for

which the Federal Government would be liable if the project were locate in any other state that contains a national laboratory.

I think this implements the understanding that the Governor of Tennessee and the Speaker of the Senate and Speaker of the House of Representatives of the State of Tennessee have expressed to me personally, and this committee in writing.

And with those understandings and the fact that this is fully offset, I am pleased to support this amendment, and yield back the balance of my time.

Further discussion on the amendment?

Mr. UDALL. Mr. Chairman.

Chairman SENSENBRENNER. The gentleman from Colorado, Mr. Udall.

Mr. UDALL. Mr. Chairman. I move to strike the last word.

Chairman SENSENBRENNER. The gentleman is recognized for five minutes.

Mr. UDALL. Thank you, Mr. Chairman.

Again, I will be brief. I just wanted to point out that I am supportive of the spirit of this amendment, but I did want to suggest that again in the original budgets that we looked at, nuclear—the research and development efforts for nuclear power were increased. The research in fossil fuels area has been kept flat. And we have cut solar and renewable energy research and development in this bill.

These cuts are going to result in a further \$3.16 million for our renewable efforts. I am hopeful that we can continue to address these as the legislation proceeds.

I thank you for your forbearance, and I yield back the remainder of my time.

Chairman SENSENBRENNER. Further discussion on the Gordon amendment?

[No response.]

Chairman SENSENBRENNER. If not, all those in favor will signify by saying aye.

Opposed, no.

The Chair is in doubt, and the clerk will call the roll. [Laughter.]

The CLERK. Mr. Sensenbrenner.

Chairman SENSENBRENNER. Yes.

The CLERK. Mr. Sensenbrenner votes yes. Mr. Boehlert.

Mr. BOEHLERT. Aye.

The CLERK. Mr. Boehlert votes yes. Mr. Smith.

[No response.]

The CLERK. Mrs. Morella.

[No response.]

The CLERK. Mr. Weldon of Pennsylvania.

[No response.]

The CLERK. Mr. Rohrabacher.

Mr. ROHRABACHER. Yes.

The CLERK. Mr. Rohrabacher votes yes. Mr. Barton.

[No response.]

The CLERK. Mr. Calvert.

Mr. CALVERT. Yes.

The CLERK. Mr. Calvert votes yes. Mr. Smith.

Mr. SMITH of Michigan. Aye.

The CLERK. Mr. Smith votes yes. Mr. Bartlett.  
 Mr. BARTLETT. Yes.  
 The CLERK. Mr. Bartlett votes yes. Mr. Ehlers.  
 Mr. EHLERS. Yes.  
 The CLERK. Mr. Ehlers votes yes. Mr. Weldon of Florida.  
 [No response.]  
 The CLERK. Mr. Gutknecht.  
 Mr. GUTKNECHT. Aye.  
 The CLERK. Mr. Gutknecht votes yes. Mr. Ewing.  
 [No response.]  
 The CLERK. Mr. Cannon.  
 [No response.]  
 The CLERK. Mr. Brady.  
 Mr. BRADY. Yes.  
 The CLERK. Mr. Brady votes yes. Mr. Cook.  
 Mr. COOK. Yes.  
 The CLERK. Mr. Cook votes yes. Mr. Nethercutt.  
 [No response.]  
 The CLERK. Mr. Lucas.  
 [No response.]  
 The CLERK. Mr. Green.  
 [No response.]  
 The CLERK. Mr. Kuykendall.  
 Mr. KUYKENDALL. Yes.  
 The CLERK. Mr. Kuykendall votes yes. Mr. Miller.  
 [No response.]  
 The CLERK. Mrs. Biggert.  
 Mrs. BIGGERT. Yes.  
 The CLERK. Mrs. Biggert votes yes. Mr. Sanford.  
 [No response.]  
 The CLERK. Mr. Metcalf.  
 [No response.]  
 The CLERK. Mr. Brown.  
 [No response.]  
 The CLERK. Mr. Hall.  
 [No response.]  
 The CLERK. Mr. Gordon.  
 Mr. GORDON. Aye.  
 The CLERK. Mr. Gordon votes yes. Mr. Costello.  
 Mr. COSTELLO. Yes.  
 The CLERK. Mr. Costello votes yes. Mr. Barcia.  
 Mr. BARCIA. Yes.  
 The CLERK. Mr. Barcia votes yes. Ms. Johnson.  
 [No response.]  
 The CLERK. Ms. Woolsey.  
 Ms. WOOLSEY. Yes.  
 The CLERK. Ms. Woolsey votes yes. Ms. Rivers.  
 Ms. RIVERS. Yes.  
 The CLERK. Ms. Rivers votes yes. Ms. Lofgren.  
 Ms. LOFGREN. Yes.  
 The CLERK. Ms. Lofgren votes yes. Mr. Doyle.  
 Mr. DOYLE. Yes.  
 The CLERK. Mr. Doyle votes yes. Ms. Jackson Lee.  
 [No response.]

The CLERK. Ms. Stabenow.

Ms. STABENOW. Yes.

The CLERK. Ms. Stabenow votes yes. Mr. Etheridge.

Mr. ETHERIDGE. Yes.

The CLERK. Mr. Etheridge votes yes. Mr. Lampson.

Mr. LAMPSON. Yes.

The CLERK. Mr. Lampson votes yes. Mr. Larson.

Mr. LARSON. Yes.

The CLERK. Mr. Larson votes yes. Mr. Udall.

Mr. UDALL. Yes.

The CLERK. Mr. Udall votes yes. Mr. Wu.

Mr. WU. Yes.

The CLERK. Mr. Wu votes yes. Mr. Weiner.

[No response.]

The CLERK. Mr. Capuano.

Mr. CAPUANO. Yes.

The CLERK. Mr. Capuano votes yes.

Chairman SENSENBRENNER. Are there other members in the chamber who desire to vote or to change their vote. the gentleman from California—Florida, Mr. Weldon.

Mr. WELDON of Florida. Mr. Weldon votes yes.

Chairman SENSENBRENNER. the gentleman from Utah, Mr. Cannon.

Mr. CANNON. Yes.

Chairman SENSENBRENNER. The gentleman from Texas, Mr. Hall.

Mr. HALL. Vote aye.

The CLERK. Mr. Hall votes aye.

Chairman SENSENBRENNER. Anybody else who desires to vote or to change their votes?

If not, the clerk will report.

The CLERK. Mr. Chairman, there are 29 yes, and zero no.

Chairman SENSENBRENNER. And the amendment is agreed to.



COMMITTEE ON SCIENCE - ROLL CALL - 106<sup>th</sup> CONGRESS

DATE: 5-25-99

SUBJECT: *Spallation Neutron*  
*HR 1655, Amendment by Mr. Gordon*

Rm.	Phone	Member	Yes	No	Not Voting	Present	Absent
2332	55101	Mr. Sensenbrenner, R-WI	1				
2246	53665	Mr. Boehlert, R-NY	2				
2231	54236	Mr. Lamar Smith, R-TX					
2228	55341	Mrs. Morella, R-MD					
2452	52011	Mr. Curt Weldon, R-PA					
2338	52415	Mr. Rohrabacher, R-CA	3				
2264	52002	Mr. Barton, R-TX					
2201	51986	Mr. Calvert, R-CA	4				
306	56276	Mr. Nick Smith, R-MI	5				
2412	52721	Mr. Bartlett, R-MD	6				
1714	53831	Mr. Ehlers, R-MI	7				
332	53671	Mr. Dave Weldon, R-FL	29				
425	52472	Mr. Gutknecht, R-MN	8				
2417	52371	Mr. Ewing, R-IL					
118	57751	Mr. Cannon, R-UT	27				
1531	54901	Mr. Brady, R-TX	9				
1431	53011	Mr. Cook, R-UT	10				
1527	52006	Mr. Nethercutt, R-WA					
438	55565	Mr. Lucas, R-OK					
1218	55665	Mr. Green, R-WI					
512	58220	Mr. Kuykendall, R-CA	11				
1037	53201	Mr. Miller, R-CA					
508	53515	Mrs. Biggert, R-IL	12				
1233	53176	Mr. Sanford, R-SC					
1510	52605	Mr. Metcalf, R-WA					
2300	56161	Mr. Brown, D-CA					
2221	56673	Mr. Hall, D-TX	28				
2368	54231	Mr. Gordon, D-TN	13				
2454	55661	Mr. Costello, D-IL	14				
2419	58171	Mr. Barcia, D-MI	15				
1511	58885	Ms. Johnson, D-TX					
439	55161	Ms. Woolsey, D-CA	16				
1724	56261	Ms. Rivers, D-MI	17				
318	53072	Ms. Lofgren, D-CA	18				
133	52135	Mr. Doyle, D-PA	19				
410	53816	Ms. Jackson-Lee, D-TX					
1039	54872	Ms. Stabenow, D-MI	20				
1641	54531	Mr. Etheridge, D-NC	21				
417	56565	Mr. Lampson, D-TX	22				
1419	52265	Mr. Larson, D-CT	23				
128	52161	Mr. Udall, D-CO	24				
510	50855	Mr. Wu, D-OR	25				
501	56616	Mr. Weiner, D-NY					
1232	55111	Mr. Capuano, D-MA	26				
TOTAL			29	0			

Attest: *Patricia Schwartz* (Clerk)

Chairman SENSENBRENNER. Are there further amendments to the bill?

[No response.]

If not, it is time for report language. If we agreed to the gentleman from Maryland's report language, which has now become moot by unanimous consent, that is stricken.

The gentleman from Texas, Mr. Brady.

Mr. BRADY. Mr. Chairman, I have report language at the desk. The clerk will report the report language.

The CLERK. Report language offered by Congressman Kevin Brady to accompany H.R.——

Mr. BRADY. Mr. Chairman, I would ask that the report language be considered read.

Chairman SENSENBRENNER. Without objection. The gentleman is recognized for five minutes.

[The information follows:]

REPORT LANGUAGE OFFERED BY CONGRESSMAN KEVIN BRADY TO ACCOMPANY  
H.R. 1655

While this bill does not authorize the full amount of funding requested by the administration for the Department of Energy (DOE)'s Industries of the Future Program, we do not intend this to negatively affect DOE's continuation of the black liquor and wood residue gasification initiative.

Mr. BRADY. I will be very brief and would like to submit my full statement for the record, Mr. Chairman.

Chairman SENSENBRENNER. Without objection.

Mr. BRADY. The forest and paper products industry currently generates a little more than half of its own energy needs, which is very good. They want to do even better, seeking and have made a commitment to a promising new technology to generate nearly—its goal is to generate nearly a hundred percent of its own power needs.

This report language simply ensures that the continuation of a valuable public-private partnership between the Department of Education and the industry, which is funded on a 50–50 basis, won't be adversely affected as a result of a decrease in the authorization amount of the industry's future funding category.

I thank Mr. Calvert for his leadership on this issue, urge my colleagues to support, and yield back the balance of my time.

Chairman SENSENBRENNER. Further discussion on the Brady report language?

[No response.]

Hearing none, all those in favor signify by saying aye. Opposed, no.

The ayes have it. And the report language is agreed to.

The report language by the gentleman from Texas, Mr. Lampson—the Subcommittee Chair wishes to be recognized to include tables in the report language.

Mr. CALVERT. Mr. Chairman, I ask unanimous consent that the budget tables for H.R. 1655 be included in the bill's report language and that staff be permitted to make any technical corrections.

Chairman SENSENBRENNER. Without objection.

The gentleman from Texas reserves the right to object, recognized on his reservation.

Mr. HALL. Mr. Chairman, these tables that are inserted, or to be inserted, end of the report, accomplish what we think are some very serious policy matters and, in fact, this language is in lieu of statutory language. Since we have had less than 24 hours notice—we have talked about notice here earlier and problems that both sides have had with the other about giving enough notice.

We have had less than 24 hours notice to review these tables. And we would request the opportunity to examine the tables in detail and negotiate over the matter. I think that is the way it ought to be done. In the spirit of committee rule 2(t)(2), we would suggest that upon completion of negotiations that a final version be signed by a majority of the Committee and thereafter the minority would have its two subsequent days to file any minority supplemental or additional views.

And at this time, before I ask unanimous consent that this procedure be adopted for this bill and the other three bills where this issue matters, let me ask, is there anything in the tables, dollar amounts or programs, that are not in the bill?

Would somebody tell me that?

Mr. CALVERT. Mr. Chairman, I believe that the tables will specify what we have agreed to today and would be outlined in the tables. And we would certainly work with the minority to assure them that we are doing in this full consultation.

Mr. HALL. All right. We would like more notice in the future. We would like the 24 hours that we are entitled to. And I think I will ask it whether it granted or not. I would like to ask unanimous consent that this procedure be adopted for this bill and the other three bills where this matter is at issue.

If there are——

Chairman SENSENBRENNER. There already is one unanimous consent request on the floor. So the Chair can't entertain that until the first one is disposed of.

Mr. HALL. I will withdraw mine, and the gentleman from California may allay my fears by addressing it a little further.

Mr. CALVERT. Well, certainly if the gentleman would yield, I agree that we should certainly give notification to the minority at every opportunity, and would certainly agree to your unanimous consent request once mine is agreed to.

Mr. HALL. I will withdraw mine until yours has had a hearing.

Chairman SENSENBRENNER. Is there objection to the unanimous consent request by the gentleman from California, Mr. Calvert.

[No response.]

Hearing none, it is so ordered.

The gentleman from Texas, Mr. Hall.

Mr. HALL. Mr. Chairman, I ask unanimous consent that this procedure that I have outlined be adopted for this bill and the other three bills where this matter is at issue.

Chairman SENSENBRENNER. Is there objection?

[No response.]

Hearing none, so ordered.

Further report language? It is not time for a motion to favorably report the bill.

The gentleman from Illinois, Mr. Costello.

Mr. COSTELLO. Mr. Chairman, I move that the Committee favorably report H.R. 1655, as amended, to the House with the recommendation that the bill, as amended, do pass. Furthermore, I move that the staff be instructed to prepare the legislative report and make necessary technical and conforming amendments and that the Chairman take all necessary steps to bring the bill before the House for consideration.

Chairman SENSENBRENNER. You have heard the motion. Is there any discussion on the motion to favorably report the bill?

[No response.]

Hearing none, the Chair notes the presence of a reporting quorum. The question is on agreeing to the motion to report the bill favorably.

Those in favor will signify by saying aye.

Opposed, no.

The ayes appear to have it. The ayes have it. And the bill is favorably reported. Members will—

Mr. COSTELLO. Mr. Chairman, I would ask for a recorded vote.

Chairman SENSENBRENNER. A recorded vote is requested on the motion to report the bill favorable. And the clerk will call the roll. Those in favor will signify by saying aye. Those opposed, no.

The CLERK. Mr. Sensenbrenner.

Chairman SENSENBRENNER. Aye.

The CLERK. Mr. Sensenbrenner votes yes. Mr. Boehlert.

Mr. BOEHLERT. Aye.

The CLERK. Mr. Boehlert votes yes. Mr. Smith.

[No response.]

The CLERK. Mrs. Morella.

[No response.]

The CLERK. Mr. Weldon of Pennsylvania.

[No response.]

The CLERK. Mr. Rohrabacher.

Mr. ROHRABACHER. Yes.

The CLERK. Mr. Rohrabacher votes yes. Mr. Barton.

[No response.]

The CLERK. Mr. Calvert.

Mr. CALVERT. Yes.

The CLERK. Mr. Calvert votes yes. Mr. Smith.

Mr. SMITH of Michigan. Aye.

The CLERK. Mr. Smith votes yes. Mr. Bartlett.

Mr. BARTLETT. Yes.

The CLERK. Mr. Bartlett votes yes. Mr. Ehlers.

Mr. EHLERS. Yes.

The CLERK. Mr. Ehlers votes yes. Mr. Weldon of Florida.

Mr. WELDON of Florida. Yes.

The CLERK. Mr. Weldon votes yes. Mr. Gutknecht.

Mr. GUTKNECHT. Yes.

The CLERK. Mr. Gutknecht votes yes. Mr. Ewing.

[No response.]

The CLERK. Mr. Cannon.

Mr. CANNON. Yes.

The CLERK. Mr. Cannon votes yes. Mr. Brady.

Mr. BRADY. Yes.

The CLERK. Mr. Brady votes yes. Mr. Cook.

Mr. COOK. Yes.  
 The CLERK. Mr. Cook votes yes. Mr. Nethercutt.  
 Mr. NETHERCUTT. Aye.  
 The CLERK. Mr. Nethercutt votes yes. Mr. Lucas.  
 [No response.]  
 The CLERK. Mr. Green.  
 Mr. GREEN. Yes.  
 The CLERK. Mr. Green votes yes. Mr. Kuykendall.  
 Mr. KUYKENDALL. Yes.  
 The CLERK. Mr. Kuykendall votes yes. Mr. Miller.  
 Mr. MILLER. Yes.  
 The CLERK. Mr. Miller votes yes. Mrs. Biggert.  
 Mrs. BIGGERT. Yes.  
 The CLERK. Mrs. Biggert votes yes. Mr. Sanford.  
 [No response.]  
 The CLERK. Mr. Metcalf.  
 [No response.]  
 The CLERK. Mr. Brown.  
 [No response.]  
 The CLERK. Mr. Hall.  
 Mr. HALL. Aye.  
 The CLERK. Mr. Hall votes yes. Mr. Gordon.  
 Mr. GORDON. Yes.  
 The CLERK. Mr. Gordon votes yes. Mr. Costello.  
 Mr. COSTELLO. Yes.  
 The CLERK. Mr. Costello votes yes. Mr. Barcia.  
 [No response.]  
 The CLERK. Ms. Johnson.  
 Ms. EDDIE BERNICE JOHNSON of Texas. Yes.  
 The CLERK. Ms. Johnson votes yes. Ms. Woolsey.  
 Ms. WOOLSEY. Yes.  
 The CLERK. Ms. Woolsey votes yes. Ms. Rivers.  
 Ms. RIVERS. Yes.  
 The CLERK. Ms. Rivers votes yes. Ms. Lofgren.  
 Ms. LOFGREN. Yes.  
 The CLERK. Ms. Lofgren votes yes. Mr. Doyle.  
 Mr. DOYLE. Yes.  
 The CLERK. Mr. Doyle votes yes. Ms. Jackson Lee.  
 [No response.]  
 The CLERK. Ms. Stabenow.  
 Ms. STABENOW. Yes.  
 The CLERK. Ms. Stabenow votes yes. Mr. Etheridge.  
 Mr. ETHERIDGE. Yes.  
 The CLERK. Mr. Etheridge votes yes. Mr. Lampson.  
 Mr. LAMPSON. Yes.  
 The CLERK. Mr. Lampson votes yes. Mr. Larson.  
 Mr. LARSON. Yes.  
 The CLERK. Mr. Larson votes yes. Mr. Udall.  
 Mr. UDALL. No.  
 The CLERK. Mr. Udall votes no. Mr. Wu.  
 [No response.]  
 The CLERK. Mr. Weiner.  
 [No response.]  
 The CLERK. Mr. Capuano.

Mr. CAPUANO. Yes.

The CLERK. Mr. Capuano votes yes.

Chairman SENSENBRENNER. Are there additional members in the chamber who desire to vote or change their vote. The gentlewoman from Maryland, Mrs. Morella.

Mrs. MORELLA. Thank you. How is Morella recorded?

The CLERK. Mrs. Morella is not recorded.

Mrs. MORELLA. Morella votes yes.

The CLERK. Mrs. Morella votes yes.

Chairman SENSENBRENNER. Further members who wish to record their votes or change their votes?

[No response.]

Hearing none, the clerk will report.

The CLERK. Mr. Chairman, 31 yes, 1 no.

COMMITTEE ON SCIENCE - ROLL CALL - 106<sup>th</sup> CONGRESS

DATE: 5-25-99 SUBJECT: HR 1655: Final Passage

Rm.	Phone	Member	Yes	No	Not Voting	Present	Absent
2332	55101	Mr. Sensenbrenner, R-WI	1				
2246	53665	Mr. Boehlert, R-NY	2				
2231	54236	Mr. Lamar Smith, R-TX					
2228	55341	Mrs. Morella, R-MD	31				
2452	52011	Mr. Curt Weldon, R-PA					
2338	52415	Mr. Rohrabacher, R-CA	3				
2264	52002	Mr. Barton, R-TX					
2201	51986	Mr. Calvert, R-CA	4				
306	56276	Mr. Nick Smith, R-MI	5				
2412	52721	Mr. Bartlett, R-MD	6				
1714	53831	Mr. Ehlers, R-MI	7				
332	53671	Mr. Dave Weldon, R-FL	8				
425	52472	Mr. Gutknecht, R-MN	9				
2417	52371	Mr. Ewing, R-IL					
118	57751	Mr. Cannon, R-UT	10				
1531	54901	Mr. Brady, R-TX	11				
1431	53011	Mr. Cook, R-UT	12				
1527	52006	Mr. Nethercutt, R-WA	13				
438	55565	Mr. Lucas, R-OK					
1218	55665	Mr. Green, R-WI	14				
512	58220	Mr. Kuykendall, R-CA	15				
1037	53201	Mr. Miller, R-CA	16				
508	53515	Mrs. Biggert, R-IL	17				
1233	53176	Mr. Sanford, R-SC					
1510	52605	Mr. Metcalf, R-WA					
2300	56161	Mr. Brown, D-CA					
2221	56673	Mr. Hall, D-TX	18				
2368	54231	Mr. Gordon, D-TN	19				
2454	55661	Mr. Costello, D-IL	20				
2419	58171	Mr. Barcia, D-MI					
1511	58885	Ms. Johnson, D-TX	21				
439	55161	Ms. Woolsey, D-CA	22				
1724	56261	Ms. Rivers, D-MI	23				
318	53072	Ms. Lofgren, D-CA	24				
133	52135	Mr. Doyle, D-PA	25				
410	53816	Ms. Jackson-Lee, D-TX					
1039	54872	Ms. Stabenow, D-MI	26				
1641	54531	Mr. Etheridge, D-NC	27				
417	56565	Mr. Lampson, D-TX	28				
1419	52265	Mr. Larson, D-CT	29				
128	52161	Mr. Udall, D-CO		1			
510	50855	Mr. Wu, D-OR					
501	56616	Mr. Weiner, D-NY					
1232	55111	Mr. Capuano, D-MA	30				
TOTAL			31	1			

Attest: Patricia Schwartz (Clerk)

Chairman SENSENBRENNER. And the motion to report favorably is agreed to. All members will have two subsequent days in which to file additional supplemental minority or dissenting views. Without objection, the bill will be reported in the form of a single amendment in the nature of a substitute reflecting amendments adopted today.

Without objection, the Chair, pursuant to House rules, is authorized to make such motions in the House as may be necessary to go to conference. And without objection, the staff will be given permission to make technical and conforming amendments.

Without objection, all of those requests are agreed to.

